Illustrations OF SYPHILITIC AFFECTIONS OF THE BRAIN.

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(*Continued from p. 741.*)

CASE 3. *Epileptoid convulsions; hemi-anæsthesia; convulsions replaced by paroxysmal mania; recovery.* (Reported by Mr. Giles.)—Jane C——, aged thirty, admitted into St. Mary's Hospital May 14th, 1875; discharged July 2nd. She had been married ten years, and had had one miscarriage and one still-born child. Her husband had not had syphilis, but the patient's habits had been irregular before marriage, and she had suffered from sore throat and mouth; the only cutaneous eruption known to the husband was acne between the shoulders. She had suffered for some time from severe headaches, and had been liable to outbursts of temper of extreme violence; and, though not a drinker, had occasional fits of drinking when vexed by anything—"at these times she took a great deal, and of the strongest." For three months she had had fits, consisting at first of twitching of the lips and face, usually coming on at meal-times, and attended with a peculiar sense of pulsation in the lips; there was at this time no loss of consciousness. Afterwards, to these symptoms were added loss of power in the arms, and finally loss of consciousness, foaming at the mouth, and general convulsions. Lately the fits were ushered in by severe trembling of the limbs, and she had a choking sensation, and during the attack the lips became blue. The attacks always left nausea and headache, confusion of mind, and tendency to stupor. When she entered the hospital she usually had a severe fit about once a week, and had had the last five days previously; minor ones more frequently.

The following were the observations noted at the first examination, May 4th:—Patient sluggish, stupid, and complaining of great pain in the head. No distortion of face, but tongue carried to the right when protruded. *Complete loss of sensation in right hand and arm, and great impairment of sensibility in shoulder, chest, and leg of this side.* No loss of power; and the patient can, with the eyes shut, touch any part of her body, and can guide this hand as well as the left. Sensation and motion perfect in left half of body. Temperature: right axilla 101·1°, left 98·6°; between toes, right, 97·3°, left 97·5°. Bowels constipated. Sight not good, variable, equal in the two eyes; pupils equal; optic discs not well defined, pink, and striated; no appearance of swelling, and size about average; retinal veins very large. Iodide of potassium was given in doses of eight grains three times a day.

May 17th.—Pain in head; drowsy, but does not sleep. After answering a few questions, will go off into a semi-comatose state, from which it is not possible to rouse her sufficiently to give further replies. This is her usual condition. Temperature: right 98·4°; left 96·6°.

18th.—Iodide increased to sixteen grains. Temperature: right 98·4°; left 97·6°. The husband seen, and found not to be aware of the anæsthesia, which is therefore probably recent. A fit this day, which began by twitching in the right half of the face and distortion to this side, after which there were general convulsions and foaming at the mouth.

20th.—Less stupid, but much pain in the head. Better sensation in the right hand, but transmission remarkably slow. Temperature: right 98·2°; left 97·9°. Left optic disc has a swollen appearance, hyperæmic; veins large, arteries scarcely visible. Right, only recognisable by convergence of vessels; margin elevated; arteries and veins as in left. Iodide of potassium, twenty-four grains three times a day.

22nd.—Double vision; the two images not on the same level, coalescing when patient looks downwards or to the right, diverging when she looks upwards or to the left. (Paralysis of right inferior oblique.) Optic neuritis more marked. Temperature 98·4° in both axillæ.

24th.—The pain in the head drives her mad.

25th.—A convulsion preceded by twitching of the right hand for three minutes. Sensation of right hand improving. A moderate prick acknowledged in three seconds; a sharp prick in one second. Temperature: right 97·4°; left 96·8°.

Fits on the 26th and 29th, beginning with twitching of the right hand and face for three or four minutes; unconsciousness; bad tongue-biting. Afterwards, sensation in right hand almost lost again. Biniodide of mercury, one-sixth of a grain in pill, with extract of gentian, ordered twice a day on the 26th. Double vision had ceased on the 31st.

June 1st.—Looking wild and flushed; delirious. Pills three times a day.

2nd.—Still rather delirious.

3rd.—Better.

4th.—Less pain in head; no delirium. Sensation good in right hand. Ophthalmoscopic appearances as before.

5th.—Violent mania this morning; got out of bed and dressed; threw knives at the nurses. It was the work of four men to get her back to bed and restrain her violence, and her shrieks and struggles were dreadful.

6th.—Violent all day, screaming and biting. Temperature 104°.

7th.—Less violent, but incoherent, and getting out of bed unless watched. Pulse 120, weak, scarcely perceptible.

8th.—A return of violence in the night, screaming and biting; wandering during the day. Pulse 104, still weak, though better than on previous day; temperature 98°.

9th.—Slept till 6 A.M., when she woke up in maniacal fury of extreme violence; got the nurse into a corner and tried to kill her. Through the day there were alternations between fury and prostration. Pulse 100; temp. 99·6°.

From this date to the 15th there were occasional maniacal outbreaks, during one of which she tried to throw herself out of a window; in another she swallowed a large amount of cotton-wool. The last attack was on the 15th. On the 17th she was amused at questions put for the purpose of testing her sanity; and now that an ophthalmoscopic examination was again practicable, the hyperæmia and swelling of the discs were found to be greatly diminished. She was taken back to the ward on the 19th, and continued to improve till, on July 2nd, she was discharged at her own wish, apparently well, and ready to resume her domestic duties.

This was one of the most interesting cases I have seen, and several interesting questions are suggested by the course of the symptoms.

The fits were of the character to which the name of "Jackson's epilepsy" is now being applied, the general convulsions and loss of consciousness being ushered in by prolonged convulsive twitching of the hand or face, or both. As Dr. Jackson has shown, attacks of this kind are symptomatic of lesion of the parietal convolutions of the opposite hemisphere. Here, however, there must have been more extensive mischief, since in the intervals there were stupor and great impairment of the intellect, one of the striking features of which was that the exertion of answering a few questions appeared to exhaust the energy of the brain, so that the patient lapsed into temporary coma.

Another very interesting feature in the case was the loss of sensation, which for a time was absolute in the right hand and arm, and well-marked, though not complete, in the body and leg of the same side. Hemi-anæsthesia without hemiplegia is exceedingly rare, and I have never seen it more strikingly illustrated; but further interest attaches to this condition here, inasmuch as it was apparently left behind by the unilaterally-beginning convulsion. It may, I think, be concluded from the association of convulsions beginning in the right hand, with loss of sensation of the same part, that the two had a common origin, and were due to the same lesion, wherever and whatever that may have been, but I have no experience which might enable me to locate it. It is not at all uncommon for unilateral convulsion to leave hemiplegia, and Dr. Hughlings Jackson attributes this to exhaustion by the convulsion of the nerve-centres concerned. The irregular discharge has exhausted the store of force in the cells. I have never been able fully to accept this explanation, since the paralysis is not, according to my experience, proportionate in degree or duration to the convulsion, and such an hypothesis clearly does not apply to

cases, like the one in question, where there is no motor paralysis, but profound impairment of sensibility.

Another point which cannot be passed over without remark, is the elevation of temperature on the anæsthetic side. It is the rule to find the temperature higher for a time on the paralysed than on the sound side in hemiplegia, and this is explained by the paralysis affecting the vaso-motor, as well as the musculo-motor system, thus allowing an increased afflux of blood. The peculiarity here is that there was no motor paralysis, but only loss of sensation. After division of one lateral half of spinal cord, the rise of temperature accompanies the motor paralysis on the same side as the injury, and not the anæsthesia on the opposite side. It has recently been shown that associated with Ferrier's motor centres, for the limbs as in the convolutions, are the vaso-motor centres for the same parts; but if the teaching of this case is to be accepted, the vaso-motor centres and the centres of perception are also in close relation, which would bring together the motor and sensory convolution areas—an inference, if established, of peculiar interest to me, since I have found that the fibres of the corpus striatum (motor) and thalamus (sensory) pass, not one set to the anterior and the other to the posterior end of the hemisphere, but to the very same convolutions.

But perhaps the feature of greatest interest is the substitution of paroxysmal mania for the epileptoid attacks, and a most remarkable and noteworthy fact is that the displacement of convulsions by maniacal delirium was a step in the direction of recovery. Had the mania been superadded to the epilepsy, or had the convulsions returned as the attacks of excitement subsided, the interpretation would have been that the latter had been due to an aggravation of the mischief, but such was not the case. We may conclude therefore that a given lesion caused first epileptoid and then maniacal attacks, and that mania in this instance was symptomatic of a minor degree of damage than epilepsy. The hemi-anæsthesia is no doubt significant in connexion with this conclusion, and the group of symptoms own as a common cause some definite lesion.

CASE 4. *Change of disposition; tendency to sleep; temporary losses of speech; imbecility; fits; remarkably weak pulse; recovery.*—On March 27th, 1875, I saw, with Mr. Chilcott, of Dartford, a gentleman, aged forty-six, of whose history the following is an outline. He had had syphilis, but his wife and children were healthy. For twelve or eighteen months he had been liable to unaccountable outbursts of violent anger, and had been unusually sleepy; once he had overslept his station in returning from town, and reached home very late and apparently drunk. He had probably also been failing in mental power, for he had ruined himself in business. On Jan. 29th he had loss of speech for ten minutes, but went up to town as usual. This was repeated several times. Apparently the difficulty was articulatory (t-t-t-t). About a fortnight later he was speechless for twenty-four hours, and from that time there was great impairment of mental power. At times he was unable to name his children, and he had forgotten all about his business and the state of his affairs. Shortly before I saw him he had had several fits, in which he became suddenly rigid and unconscious, without falling; there was then jerking of the head and limbs, and afterwards he was helpless and sleepy. He would eat at any time, and to any amount, whatever was set before him, but without any apparent enjoyment. The bowels were much confined, and he had had difficulty with his urine and fæces. The face was heavy and expressionless, especially on the left side, but he could wink either eye, and there was no paralysis of the limbs, though there had been weakness of the left arm and leg. He answered questions fairly well, my visit falling on one of his better days. He complained of his sight, but the ophthalmoscopic appearances had no significance. There was nystagmus, and at first, during the examination of the eyes, he would open his mouth. Pulse extremely weak, short, and irregular. The treatment resolved upon in consultation, and carried out by Mr. Chilcott, was to give iodide of potassium, at first twenty grains, then thirty grains, with ammonia, three times a day, and one-twelfth of a grain of biniodide of mercury in pill night and morning. The bowels to be kept open. Later the action of the heart became so feeble that digitalis was added.

On Oct. 2nd he was brought to my consulting-room by a friend. He had been apparently well, but, having left the neighbourhood of Mr. Chilcott, had ceased to take the medicines. He said he was quite well, and had started again in business a fortnight before. He had an imbecile look, however, and his friend told me he was not himself, and was irritable and soon confused. Iodide of potassium resumed, the dose being seven and a half grains.

Dec. 18th.—Had been at business, and gone through a critical and exciting time as well as ever; head clear, and memory good. Lately irritable, low-spirited, sleepy; had stammered occasionally. Expression of face no longer imbecile. Pulse very weak. Ophthalmoscopic indications negative, but field of vision limited on patient's right.

Jan. 29th, 1876.—Head clear, but patient sleepy, apathetic, and emotional; tired out before 2 P.M.; less headache. Twelve grains and a half of iodide of potassium.

Feb. 10th.—Not so well. Headache; cries a good deal; has delusions that a third person had been at table with himself and his wife; soon fatigued. Pulse very weak. Not to go to business. Thirty grains of iodide three times a day; one-twelfth of a grain of biniodide of mercury in pill twice daily.

16th.—Still dull, forgetful, and liable to delusions, to which he holds obstinately; sleeping much, but starting. Pulse exceedingly weak. Infusion of digitalis given with the iodide.

23rd.—All the unfavourable symptoms had vanished, and the pulse was full, firm, and regular. He remains well, and is actively engaged in the City every day.

October.—Still well, but requires iodide from time to time.

The condition in this case was probably a more or less general affection of the pia mater over the hemispheres. A remarkable feature was the effect upon the action of the heart, which was so weak as to give rise to serious apprehensions. It varied with the other symptoms, and was therefore probably due to the same organic cause with them, and not to a distinct lesion in the medulla. It would be an important addition to our knowledge could we ascertain what the organic condition is in such cases, and how it operates.

For the notes of the following case, which is one of unusual interest, I am indebted to Dr. Mahomed, with whom I saw the patient.

CASE 5. *Occipital headache; collapse, with impaired articulation, hiccough, and increased flow of saliva; slight cross-paralysis of left facial and right limbs; vertigo and staggering; later, arterial spasm on right side, &c.; recovery.*—The patient, a gentleman aged twenty-six, had enjoyed good health, but was always very irritable, and the family history was highly neurosal. For nine months he had had heavy work and great responsibility, and had complained of pain in the left occipital region for two months or more, always worse after sexual indulgence. For a week he had kept late hours, and had been exposed to unusual sexual excitement, when, on the morning of August 26th, 1875, he felt faint on waking, and very hungry, and ate a large but hurried breakfast. Soon afterwards intense pain came on in the left occipital region, he became faint, looked pale and pinched, and broke out into a cold perspiration; his articulation was embarrassed, so that he could scarcely speak; there was also a profuse flow of saliva and urgent hiccough.

Seen at 10.30 by Dr. Mahomed; the occipital pain continued, and he complained of numbness and stiffness in the left side of the face, the left eye feeling full and "bunged up." Articulation was imperfect, and he spoke with a nasal twang. The left corner of the mouth drooped slightly, the cheek was flaccid, and he could not whistle; the uvula was drawn markedly to the right, and the soft palate did not move on taking a deep inspiration or saying "Ah." Tongue protruded straight. Left pupil much smaller than right, and conjunctiva of this eye injected; no strabismus. Sensation of the left face unaffected. Right hand weaker in grasp than left. Vertigo very severe, with staggering on standing or walking; without support he would fall. Pulse 84, soft, and irregular; respiration normal; temperature 98·6°; appetite ravenous; tongue clean. No unconsciousness; no intolerance of light; no vomiting. The patient was sent to bed; ice was applied to the head, and a blister to the back of the neck. Forty grains of bromide of potassium ordered to be taken at once. During the afternoon there was difficulty in swallowing, and a tendency for food to return through the nose. After food or speaking severe

and prolonged hiccough always followed. Vertigo very bad. When dozing the right leg was observed to be frequently drawn up and stretched out, as if ill at ease. In the evening, while the headache was less, and the speech better, he was extremely prostrate, unable to turn in bed, or sit up without assistance. Pricking and numbness down right side. Left pupil still contracted, but injection of conjunctiva less marked. Vomiting once after milk and brandy, preceded by nausea. Hiccough almost constant and very distressing. Pulse 100, short and soft, regular; temperature 99°; skin dry. He could pass his urine, but in a very feeble stream; it was extremely offensive, ammoniacal, and covered with a glistening film. Aperient pills and draught ordered.

Aug. 27th.—Rest broken; sleep not good; still great difficulty in swallowing, and hiccough very frequent; headache much less; corners of mouth equal; no obvious difference in grasp or strength of the two hands, but both weak. No obvious facial paralysis, but soft palate still drawn to right. Pricking sensations in right leg; no loss of power. Pulse 80; temperature 99°; tongue clean; bowels open, stools dark; urine expelled feebly, ammoniacal, and most offensive; respiration normal; prostration extreme, but some return of strength towards evening, and pulse firmer. Ammonia, ether, and bark ordered while the prostration continued; bromide of potassium and ammonium given.

28th.—A good night; much stronger; able to raise himself in bed and sit up; speech more distinct, and can whistle; less headache; pupil less contracted; can swallow, but hiccough almost constant; still has peculiar sensation in right leg. Pulse 88, rather hard; temperature 99·6°.

29th.—Sleep not so good; more vertigo and headache; trickling sensations in right limbs; hiccough very frequent. Temperature 99·3°; pulse 80. *Pulse in left wrist more distinct than in right, where it is small; when washed, the water feels hot to right hand, natural temperature to left; right hand colder to touch than legs;* tactile sensibility perfect, can pick up a pin; urine still ammoniacal and stinking; *left eyelid drooping slightly.*

It was only at this time that the history of syphilis was made out. He acknowledged readily sexual excesses and consequent accidents, but was not aware that syphilis was among them; it was ascertained, however, that he had suffered from an obstinate sore-throat, for which mercury had been administered by an eminent surgeon for six months. An ophthalmoscopic examination showed the discs to be slightly swollen and the fundus to be hyperæmic. One-twelfth of a grain of biniodide of mercury in pill given at night, and iodide and bromide of potassium, of each ten grains, with ammonia, three times a day.

Aug. 30th and 31st.—Less headache, but irritable hiccough; still troublesome weakness and *coldness* of right limbs; ptosis and marked puffiness of left eyelid. Pulse 120, hard and full between the beats; temperature 99·8°, and on the evening of the 31st 100·8°, when half a drachm of solution of morphia, at night, and two grains of mercury-with-chalk, with half a grain of quinine, every four hours, were given instead of the iodide mixture and pill.

Sept. 1st and 2nd.—Good nights after the morphia, and less hiccough; much œdema of left eyelid; right limbs much colder than left, especially at extremities; now able to stand, and no dragging of right leg perceptible; free perspiration at night. Temperature 99·8° on the 1st, 98·6° on the 2nd. Purgative pill and draught given, on account of constipation.

3rd.—In addition to trickling sensations in right limbs, a feeling of warmth when the hand is placed in cold water, and objective coldness of hands and feet, hyperæsthesia is present, a slight pinch or tickling giving pain.

From this time there was gradual improvement, and on Sept. 11th the patient went to the seaside. The difference in temperature on the two sides continued. (A thermometer in the left hand gave 97°; in the right hand could not be made to register.) The left eye felt and looked weak, and numbness was felt on this side of the face.

Sept. 14th.—Right eyelid swollen, quite closing the eye.

19th.—Headache after a first attempt to read. The patient resuming his bath, the comparative warmth of the water felt by neck, body, and buttock, as well as face and limbs. Mercury discontinued. Iodide of potassium given.

Oct. 8th.—Came to town for inspection. He described a difficulty he at first experienced in walking as a tendency to roll to the left side, which he had to counteract by careful effort. Water still feels warmer to right half of body. Left pulse larger and fuller than right. Left side of face in profile noticed to have a melancholy expression not observed on the right (corroborated by a third person who had observed it independently). Voice, formerly remarkably good, weak and toneless; quite unable to sing or shout.

Nov. 2nd.—Sleep not good. Pain in left eye during the night; unnatural feeling in left eyebrow and forehead. Still slight difference in temperature of water to the two hands, &c.

24th.—Has returned to his business in town. Left eye looks "weak," as his friends call it. Severe pain, of neuralgic character, in left occipital and parietal regions and back of left eye, for ten days. Optic discs not well defined, and retinal veins full.

Dec. 22nd.—Has done his work, and continued to improve; but lately has had great pain and *tenderness* in left occipital region, near the mastoid process; and the head cannot be bent backwards or turned to the left without pain. No neuralgia.

Jan. 7th, 1876.—Giddiness, in which the floor seems to oscillate up and down, accompanied by qualmishness, excited chiefly by sudden exertion or turning the head quickly. Can only lie comfortably on the right side, any other position bringing on pain and tenderness in the back of the head and neck.

When seen recently he was quite well.

It is most fortunate that a case so full of interest as this was under the daily observation of a careful and competent observer like Dr. Mahomed, to whose minute record of every detail the completeness of the picture is due.

The seat of the lesion is fixed by the cross paralysis—it could scarcely be elsewhere than in the lower part of the pons. I am of opinion moreover that (notwithstanding the usual "election" of the membranes for attack by syphilis) it was in the substance of the pons, and did not invade it from the surface. I have reported a case* in which a small tumour near the centre of the pons gave rise to symptoms which set in suddenly. Localisation of the disease within the pons gives interest to the other symptoms. The most striking of these were the extreme prostration and muscular weakness. It was a question of some prognostic importance whether this general loss of power was or was not due to a certain degree of paralysis from the lesion in the pons. This seemed likely to be the case, but on careful examination we attributed it to the complete loss of tone in the circulation; the heart was beating very feebly, and there seemed to be no tension whatever in the arteries; there was not apparently sufficient intravascular pressure to produce the exudation required by the nervous and muscular structures for the exercise of their functions. The paresis, being explained as a secondary result of the state of the circulation, became less serious. The proximity to the seat of disease of the nervous centres which control the action of the heart would account for the cardio-vascular depression, and this, not proving fatal at once, we expected to disappear as in the sequel it did, and with it its consequences. But as the primary depression or shock passed off, another and more permanent vaso-motor phenomenon became manifest—i. e., general arterial spasm throughout the right half of the body. This was detected by the difference in the pulse of the right wrist, but was rendered more evident by the lower temperature in the right side of the body, due of course to exclusion of blood by the contracted muscles, and again by the interesting fact, which was observed for some time, that tepid water felt warm to one hand—the right—and cold to the other. Perhaps it may be inferred from the permanent vaso-motor effect that the primary shock fell upon the sympathetic centre in the pons, and not upon the nucleus of the vagus. Whether the puffiness of the eyelids was due to vaso-motor disturbance, or had some other cause, is uncertain. The troublesome hiccough seemed to point to irritation of the pneumogastric nerve, but it is not impossible that it may have been the equivalent of vomiting, and substituted for this symptom, which, as is well known, may be produced by disease of any part of the brain.

(To be concluded.)

* Clin. Trans., vol. v., for 1872.

CASE OF SPINA BIFIDA, TREATED BY THE IODO-GLYCERINE SOLUTION.

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IN the beginning of September last (1876) Dr. Milroy, of Kilwinning, informed me by note that, a few days before, he had attended at the birth of a child which was the subject of spina bifida in the lumbar region, and wished to know when it would be proper to operate upon it. To this the reply was that it would be well to allow the child to be fairly over the accidents of birth, unless there was reason to fear the speedy bursting of the tumour, and the consequent draining-off of the spinal fluid.

When nearly a fortnight old, the child was brought to Glasgow to be under my care, and this was then done from a fear that an ulcerated or abraded surface on the most prominent part of the tumour might possibly result in perforation of the sac and escape of the fluid, which is known to be so fatal. This abraded surface was more than an inch in diameter. There was no paralysis.

On the 14th September I saw and examined the tumour, and on the day following operated on it by puncture and injection of the iodo-glycerine fluid, which I have used and recommended for such cases. As the sac was neither very large (the size of an ordinary peach) nor very full, little escape of the clear serous fluid was permitted, and about half a drachm of the iodo-glycerine solution was injected. Collodion was, as usual, applied to the opening, and over that a square inch of lint dipped in collodion, which effectually closed the wound. No disagreeable symptoms followed; the sac seemed in part to solidify, and soon appeared to be about half the size it was previous to the operation.

Watching it from day to day, it did not seem to shrink readily, or so quickly as I could wish, and on the 26th September it was again punctured and injection attempted. The size of the swelling at this period was so much reduced that I was very cautious in pushing the trocar into it, and the cannula had so little hold and space that it slipped out, when I tried to inject a little of the solution by placing the nozzle of the syringe in the opening, but I suspect that very little, probably only a few drops, obtained admission. Collodion and lint were applied as before. Next day the whole tumour seemed slightly inflamed, and from that date has continued gradually to solidify. By the 4th or 5th of October the abraded surface had completely healed, and on the 12th the parents were permitted to return with the child to their home in the country.

It occurred to me that collodion might aid in producing or favouring that corrugation of the skin which is known to take place in favourable cases, and a piece of lint covered with it was laid over the tumour. Whether this expectation may be well founded we cannot at present say, but the application is sufficiently safe, and, indeed, somewhat protective.

The following is, in substance, the report of it sent to me on the 24th October:—"Child well, tumour shrunk a good deal. Has a thick cord of skin a little raised all round it. There is still about the breadth of a shilling of thin bluish-coloured skin covering the centre of it, but it feels firm to the touch underneath, and is nearly quite flat."

This is now the fourteenth case of spina bifida (of which we have any account) which has been subjected to treatment by injection of the iodo-glycerine solution, and of these eleven have proved successful. In all the lumbar cases which I have treated it has been uniformly fortunate, and lumbar cases are known to be much more numerous than dorsal and cervical put together.

Glasgow.

FEVER IN LURGAN.—A considerable amount of typhoid fever is prevalent at present in Lurgan, caused by defective sanitary arrangements and the use of impure water.

CROTON-CHLORAL IN NEURALGIA.*

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WE have recently been informed by Dr. Oscar Liebreich that the substance which is commonly called croton-chloral contains two more atoms of hydrogen than was supposed, and is in reality butyl-chloral. In this paper I shall, however, use that name by which the drug is at present best known and will be most readily recognised. My chief experience of this remedy has been in the out-patient department of the Bristol General Hospital, but I have also frequently prescribed croton-chloral elsewhere, with substantially similar results. As I have more systematic notes of the cases treated at the hospital than of the others, I have selected instances from my case-books illustrative of the various disorders in which I have there used the drug, and of the results.

A brief summary of the *physiological* action of croton-chloral may serve as a useful preface to the record of its effect in the cases that I shall proceed to relate. Liebreich has shown that this drug is essentially an anæsthetic, and in large doses a hypnotic; that anæsthesia always begins at the *head*, and only after this region is fully under the influence of the croton-chloral and sleep has been induced does the anæsthetic effect gradually extend over the rest of the body. With large doses the respiration and pulse become slower, and a fatal result is due to arrest of the *respiratory* movements, not to paralysis of the heart; in this respect croton-chloral differs from chloral, as with the latter death occurs directly from cessation of the *heart's* action.

We should from the above be led to expect that the most marked effects of croton-chloral as a therapeutic agent would be seen in the case of painful affections of the *head*.

I have prescribed the drug for about 120 hospital patients, and have made use of it in cases which may be arranged under the following divisions:—

A. Pain or other abnormal sensations about the face, head, and neck, including—(*a*) Ordinary headache, affecting the anterior part of the head, or the occiput and upper part of the back of the neck. (*b*) Megrim, migraine, or so-called bilious sick-headache. (*c*) Facial neuralgia and toothache. (*d*) Headache associated with cerebral disease. (*e*) Sensations such as giddiness, without actual pain.

B. Pain in other regions, comprising—(*a*) Pain other than visceral, in the limbs and trunk. (*b*) The pain of dysmenorrhœa. (*c*) Pain connected with digestion.

C. Hysterical convulsions.

A. Pain or other abnormal sensations about the face, head, and neck.

(*a*) *Ordinary headache*, varying from slight attacks to very severe, the worst of the latter being known as migraine, and popularly as sick-headache, bilious sick-headache, or bilious attack. The affection in all these cases I believe to be essentially neuralgic. The nerve usually at fault is the first or ophthalmic division of the fifth; this supplies the skin over the temporal, frontal, and anterior parietal regions; the area supplied by branches of this nerve is that most generally affected in headache. The auriculo-temporal branch of the third division of the fifth is distributed over an area extending from above the ear to the vertex. So far the whole area is supplied by the fifth nerve. Passing backwards, we come to the region of cervico-occipital neuralgia, occupying the posterior parietal and occipital regions and the back of the neck. The nerves concerned here are the posterior branches of the first four spinal pairs, and especially the great occipital.

The following is a brief description of an attack of neuralgic headache. The pain at the beginning is generally limited to a small area of varying position, and is usually unilateral; it may remain localised, but more often spreads from that spot over a greater or less extent of surface, and

* Read before the Bristol Medico-Chirurgical Society.

may affect both sides, or be simply hemicranial. It is not necessarily limited to the region of any one nerve, but may at the height of the attack affect the whole scalp. The pain, as is usual with neuralgia, varies in character and intensity. After the pain has ceased, the scalp is often left very tender for a day or two, so that female patients will frequently say that the head is so sore that they cannot comb out the hair.

Migraine, sick headache, or bilious headache, is an important variety. This is not the place to enter into a discussion of the pathology of this affection, but I may say that my experience has led me to adopt the opinion held by the late Dr. Anstie, that it is simply a neuralgia. Anyhow, it cannot be too distinctly remembered that it is a pure neurosis, and is not due to digestive disturbance. It is not an uncommon thing to meet with patients, particularly anæmic women, who, suffering from what they know as bilious sick-headache, fly for relief to so-called antibilious pills and the like, which, far from curing the malady that is the outcome of nervous exhaustion, add the element of digestive derangement, and thereby aggravate the original complaint. In migraine, the act of vomiting is, in fact, only an expression of the intensity of the nervous exhaustion; and this act may be associated with severe neuralgias of other parts of the body than the head. Dr. Anstie records cases of intercostal neuralgia and of neuralgia of the testis, in which the attacks sometimes culminated in vomiting.

I will begin my examples of the use of croton-chloral with a well-marked instance of migraine. (Unless otherwise specified, the dose in each case was five grains three times a day.)

CASE 1.—Female, married, age forty-five. Subject to attacks of "the bile." This, on analysis, resolved itself into severe headache, going on to nausea and sometimes to vomiting. Between these attacks of "bile" she frequently had headaches of less intensity. Menstruation had ceased for eight months. In a week, when I saw her next, she said she had had no attack of the "bile" since, but had been troubled with the headache—that is, the neuralgia had been deprived of its intensity. In another week, she stated that the attacks of headache were very much less frequent and less severe; and in another week she was quite free from all pain.

CASE 2.—Female, single, age seventeen. Very marked anæmia and chlorosis, with the ordinary symptoms. Had not menstruated. She complained of headache, beginning at the right temple and spreading over the head; not accompanied by vomiting. Quinine and iron for a fortnight produced some general improvement, but had no effect upon the headache. Croton-chloral was then substituted, and the headache had entirely disappeared in three days, and did not return.

CASE 3.—Female, married, age twenty-four. For six or seven months had been subject to vertigo and pain in the temples, the attacks of pain coming on for about half an hour at a time, and then leaving her giddy, with a peculiar taste in the mouth; this would occur several times in the day. She always felt ill, and was languid and sleepy. Menstruation regular; no children. In a week, she said the headache was less frequent, less severe, lasted a shorter time, and left no giddiness behind. In another fortnight the pain had entirely left.

CASE 4.—Female, married, age twenty-four. Subject to headache, beginning at the right side of the head, and thence extending into the ear and up to the vertex; limited to the right side. The scalp was very tender after the attacks. Cured in four days.

CASE 5.—Female, single, age seventeen; anæmic; subject to headache and vertigo. Under iron the general condition improved, but the headache remained untouched. Croton-chloral almost entirely removed the pain in two days.

CASE 6.—Female, single, age fifteen; somewhat anæmic. For three months had suffered from headache and giddiness, the pain affecting the right temple and forehead, and leaving the skin tender. The headache was speedily cured.

CASE 7.—Female, single, age sixteen. For three months had had severe pain in left temple, coming on very frequently in the day, and lasting for about ten minutes at a time, with a sensation of great heat of head. Cured after two or three doses of croton-chloral.

CASE 8.—Female, single, age seventeen. For about a fortnight had suffered from pain on the left side of the head, leaving the skin tender; also pain between the shoulders. The headache was cured by four doses; the pain between the shoulders was not relieved.

CASE 9.—A girl, eight years old, of tubercular aspect. This is, I believe, the youngest patient to whom I have had occasion to give croton-chloral. For about three months she had suffered from constant frontal headache; this sometimes came on suddenly with such severity as to make her cry out. Sleep was disturbed; slight cough. The scalp was so tender that she could not bear to have the hair combed out. The history of this case was such as to raise a suspicion of threatening intracranial mischief; there was, however, no other evidence to be gained by examination of the patient, and the tenderness of the scalp pointed to simple neuralgia. I prescribed three grains of croton-chloral three times a day. Next week the patient was very much relieved. I then substituted bromide of potassium, when the pain became worse, and on a return to croton-chloral the headache again almost disappeared.

CASE 10.—Female, married, age sixty-seven. This is an example from the other extreme of life. For about five weeks the patient had suffered from severe and almost continuous headache, beginning at the occiput and extending forwards, leaving the scalp very tender. In two days the pain was very much relieved, and there was no soreness of scalp after it. On bromide of potassium the head became bad again, but a return to croton-chloral was followed by immediate and marked relief.

CASE 11.—This case is of interest as showing the association of vomiting with neuralgia of traumatic origin, and the effect of the drug upon the complaint. Female, single, age twenty-two. For some years had been subject to headache, which was sometimes very severe; it always began over the right eye, in the scar of a cut received when twelve years old. For the last two years the pain had been very great; it was sometimes accompanied by severe vomiting. There was a crop of herpes over the right eye. The association of neuralgia with herpes, and of herpes with an abnormal condition of the adjacent nerve, is well known; hence, I think, we may conclude that here the neuralgia was due to the abnormal state of the nerve consequent upon the wound, and that the ultimate cause of the vomiting was this local lesion. The bearing of this case will be seen upon what I said before with respect to the pathology of migraine. After taking croton-chloral for a week, the patient came back, and said she had had scarcely any pain since she had taken the medicine. Here we have an instance of the effect of the drug upon a neuralgic affection referable to a definite local lesion.

Thus far I have quoted cases of female patients only, and I need not say that by far the majority of neuralgic patients are women. However, in my limited experience with regard to the action of croton-chloral in cases of headache in male patients, the result has been more uniformly satisfactory than in the case of women. The following are examples.

CASE 12.—Male, married, age thirty. For six or seven months had suffered from continuous frontal headache, with vertigo on looking steadily at any object. Complained of drowsiness; no other alteration of sensation; movement normal; optic discs unaffected. Tonics produced no improvement, but the pain was very much relieved by croton-chloral. He still felt drowsy at work.

CASE 13.—A boy, age twelve. Headache for a fortnight, beginning at the side and spreading over the head. No vomiting. Cured in three days; no relapse.

CASE 14.—Male, married, age thirty-three. For *three years* had suffered from pain in the head, which he described as "not exactly headache," beginning at the occiput and running forwards, sometimes on one side of the head and sometimes on the other. His knees were weak; no other history or evidence of disease. In a week he was very much relieved, and soon the headache was entirely removed.

CASE 15.—Male, married, age forty. For six months had been troubled with pain in the left temple, darting in character, leaving the scalp extremely tender; he could not lie on either side to sleep, as his "ears got numbed." No other evidence of disease. In a fortnight he was cured. In the fulness of his gratitude he told me that he had been treated at another institution for three months without any

relief (and had therefore, doubtless, had all the ordinary remedies), that he had been unable to take his food or to read at all; whereas now his appetite was good, he could read small print without any trouble, and had not felt so well for twelve months.

CASE 16.—Male, single, age thirty-three. For twelve months had had severe, almost constant, frontal headache, that left the scalp quite sore. He was very giddy and nervous. In a week the pain and giddiness were almost gone.

CASE 17.—Male, single, age twenty-one. For about a month had suffered from constant occipital pain, which was getting worse. There was no soreness of scalp. Had constitutional syphilis three years ago. The optic discs were normal. From the history I thought there might be some intracranial disease, and prescribed iodide of potassium; the pain, however, became worse, so as to interfere with sleep. I then gave croton-chloral with marked benefit; the headache recurred only occasionally, and was but slight when it did return.

CASE 18.—A boy, age ten. Generally in bad health; enlarged glands in the neck, ecthyma about the knee, and altogether very much out of health; complained of frontal headache. The phosphate of iron had no effect on the pain, but croton-chloral removed it entirely.

(To be concluded.)

IMPACTION OF A BONE IN THE LARYNX FOR FIVE WEEKS; REMOVAL OF IT BY THE AID OF THE LARYNGOSCOPE.

BY W. MACNEILL WHISTLER, M.D.,
PHYSICIAN TO THE HOSPITAL FOR DISEASES OF THE THROAT.

ANN R——, aged forty-four, married, stated that while eating some sheep's head at midday on Friday, April 30th, 1875, she felt herself suddenly choked by some hard substance which she had swallowed. The immediate symptoms were dyspnœa, violent cough, and pricking pain. She sent for a medical man in the neighbourhood, who passed an instrument into the œsophagus for the purpose of pushing the foreign body downwards, in the hope of thus relieving her. On the following day, as she was no better, he ordered her a gargle. For the next few days she suffered very much from an aggravation of all the symptoms, so that on the Sunday she was confined to her bed, propped up on pillows, so great was her difficulty in breathing. On Thursday, May 6th, she applied at one of the metropolitan hospitals, as she was still in great suffering. No search was made for any foreign body on this occasion, nor was there any laryngoscopic examination. The gentleman under whose care Mrs. R—— came seems to have been under the belief that no foreign body could any longer be present, either in the œsophagus or larynx. He prescribed for her an expectorant draught of cascarilla and squills, from which I infer that, at that time, her cough was the most troublesome symptom. This treatment was steadily preserved in until the 27th of May; but, as she derived no benefit from it, she sought other advice, and was recommended by the practitioner whom she consulted to apply at the Hospital for Diseases of the Throat, and in this way she came under my care at Golden-square on June 2nd, nearly five weeks after the accident had occurred.

She was suffering from stridulous breathing, hacking cough, with mucous expectoration, which was occasionally tinged with blood. Together with this there was constant soreness in the larynx, with every now and then sharp, shooting pain extending into the right ear, and tenderness on pressure over the thyroid cartilage. The dyspnœa was not very great, nor was it persistent, but at times it became distressing from paroxysms of cough. There was also aphonia. The patient had lost flesh, and had an anxious and distressed appearance. She said to me that she knew she had a bone in her throat, though no one would believe her.

On examining her with the laryngoscope I found the larynx very much inflamed. The ventricular bands, or false cords, were swollen so as to cover over a great portion of the vocal cords, which were thickened and red. The cushion of the epiglottis was inflamed, and the mucous membrane around it was a good deal swollen. So also was the interarytenoid fold, and there was a spur-like prominence extending from its central portion forwards over the vocal cords. In the median line of the glottis, lying just between the vocal cords, in an antero-posterior direction

FIG. 1.

was a thin, white line, evidently caused by some foreign body. The anterior portion was imbedded in the tissues, just below the cushion of the epiglottis, while the posterior part was tightly fixed in the interarytenoid fold wedged in the central swelling spoken of above. The upper edge was slightly oblique, from before backwards, and was about on a level with the ventricles, just above the vocal cords. Owing to the general thickening, consequent upon the long-standing irritation, the abduction of the vocal cords was a good deal impaired, and the narrowness of the glottis prevented anything being seen beyond this white thread-like line, which looked exactly like a delicate fish-bone.

It seemed a not very difficult matter to remove this, and I proceeded to do so with a pair of non-cutting laryngeal forceps; but on taking hold of it, which was accomplished with some little difficulty, owing to the irritability of the larynx and the deep-seated position of the foreign body, I was surprised to find that what appeared to be so slender a spiculum was so firmly impacted as to resist all force of traction which I deemed it safe to exert; and each effort was followed by such severe spasm of the glottis, that, after four attempts, I was obliged to desist. The patient was sent up into the ward, ordered to suck ice, and to be kept at perfect rest. Three hours afterwards no œdema had supervened, though there was a good deal of soreness of the larynx; and I determined to postpone all further attempts at removal until the following day. On the next afternoon, when I saw her, she said that she had passed a tolerably comfortable night, and felt relieved by a sedative inhalation she had been using in the morning. The larynx was less irritable, and the foreign body was readily grasped by the instrument. At this sitting, however, the result was no more successful than it had been on the previous afternoon, and it became evident to me that nothing would remove the foreign body short of such force as would drag it from the larynx regardless of all consequences resulting from severe and dangerous laceration of the parts. The traction upon the foreign body, although very gently exercised, caused a slight hæmorrhage, and again spasm of the glottis, distressing retching and vomiting, forced me to desist. The patient was seen on this occasion by my friend and colleague Dr. Morell Mackenzie, who kindly examined her with me; by Dr. Shattuck, of Boston; Dr. Cowling, of Texas, U.S.A.; and several other gentlemen who were visiting the hospital. The question now arose whether it would be more advisable to perform tracheotomy or to carry out farther the plan I had commenced for its removal. Taking into consideration that there were no urgent symptoms, I determined to defer the graver operation, which I was prepared to resort to at any moment that it might become necessary, and, in the meanwhile, to put my patient under such treatment as would tend to allay the inflammation of the larynx and diminish the swelling which held the foreign body so tightly fixed, and at the same time see whether very gentle traction exercised upon it each day would not enable me to remove it. The treatment prescribed was benzoin inhalation three times daily, with cracked ice to suck at intervals when the pain was most acute. I may here state that acute pain was never a prominent symptom while she remained in the hospital, what she complained of being a constant soreness and irritable cough, and the ice was administered, as a rule, only after the use of the forceps. She was kept at rest and put upon milk diet, that the irritation from swallowing might be as little as possible.

BEST COPY AVAILABLE

Without entering into too much detail concerning each day's operation, I will merely say that I persevered in my plan of treatment, notwithstanding that for the first few days the foreign body remained as firmly impacted as at the commencement. The local treatment was, however, producing a good effect; the cough which had distressed her so much was daily diminishing. She passed comfortable days and slept well at night. On Sunday, June 6th, the glottis was sufficiently wide open for me to see the lower part of the foreign body deep down in the larynx. This part appeared wider and thicker than the upper portion, and I thought that by taking hold of it at the lower part I should be more successful. In this I was disappointed, for the introduction of the instrument so low down produced most violent spasm of the glottis; the dyspnœa was very great, and for some moments suffocation seemed imminent. It was clear that the greatest point of resistance was at the lower part, and I next endeavoured to raise it by means of a laryngeal probe, bent at the end into a blunt hook, which I passed beneath the foreign body, applying the force in this way to several points successively. This had the effect of loosening it somewhat, for on Monday I could for the first time feel it move slightly. The swelling continued to decrease, and on Tuesday afternoon I tried to loosen it still more by making traction from before backwards in order to disengage the anterior edge from under the epiglottis. Finding that it did not yield to this, I tried the opposite plan—to disengage the posterior part. Having drawn it well forward, I made traction from below upwards, but now the posterior superior angle, grasped by the forceps, came away, leaving the rest behind; and for fear of inflaming the larynx, as the sitting had already been a long one, I was obliged to defer any other attempt until the following day. The fragment removed in the process, as mentioned, proved to be bone. At the next morning's visit I found that the larynx had suffered no bad results from the previous day's operation, and the swelling was so much diminished by this time that the glottis was fairly open, and there was a good deal of free movement in the part. On making a careful observation of any changes in position that the bone might undergo during the respiratory movements of the larynx, and especially the effect produced upon it by violent coughing, I found that, during a deep inspiration, the bone was partially freed from its hold at the posterior superior part where it was in relation with the interarytenoid fold; and that, during the act of coughing, this same part rose to a certain extent above the fold, to sink again immediately during inspiration; while no effort of coughing, no matter how violent, served to move it in any greater degree. Acting upon this, and in order to derive all the aid that I could from these movements, I told the patient to take a deep inspiration. While she did this, I passed the forceps along the posterior border of the bone, close in front of the interarytenoid fold. Seizing it at the very lowest part I could reach, and directing Mrs. R—— to cough violently, I made, during this expulsive effort, steady traction from below upwards and from behind forwards, when, after a moment's resistance, it slipped suddenly from its place with a perceptible jerk, to my great pleasure and the immediate relief of the patient. No spasm occurred at this time, and the larynx was not lacerated in the extraction. After the removal of the bone, the laryngoscope showed congestion and swelling of the mucous membrane below the vocal cords, and a linear ulcer in front extending to the cricoid cartilage, and a similar one behind in the interarytenoid fold. (See Fig. 2.)

FIG. 2.

FIG. 3.

The foreign body proved to be a thin lamella of bone, irregularly quadrilateral in shape, resembling a fragment of the perpendicular plate of the ethmoid. It measured in a horizontal direction—namely, antero-posteriorly as it was situated in the larynx—$\frac{14}{16}$ in. in its longest measurement; while the posterior border, which rested against the interarytenoid fold, extended downwards for a little over $\frac{3}{4}$ in. The anterior portion was a rough articulating surface, thicker than the rest, measuring a little over $\frac{1}{4}$ in. in a vertical direction. The surfaces of the bone were smooth and hard; its borders were jagged, presenting a cutting edge in every direction. (See Fig. 3.)

This case appears to me to be interesting as showing how a large and lacerating foreign body may remain impacted deeply in the larynx for many weeks without producing any other symptoms, after the first few days, than those of laryngitis; while, at the same time, it illustrates the absolute necessity of a laryngoscopic examination in all such cases, both for purposes of diagnosis and treatment. The absence, on the one hand, of persistent suffocative dyspnœa does not prove the absence of a foreign body in the air-passages; while, on the other, pain and difficulty in deglutition, constant soreness and tenderness in the larynx, cough and paroxysmal dyspnœa, associated even with a history of the attack having come on suddenly during a meal, and the swallowing of a foreign body, are no signs of the presence of such a body in the larynx or œsophagus. They may be due merely to the injury produced by it in its onward passage to the stomach, the irritation remaining long after the irritant has gone. I may here mention a case in point which came under my care a short time ago. Mrs. L——, aged sixty-two, was sent to me by a medical friend of mine, with the following history. She said that two days previously she was eating some rabbit for supper, when she swallowed what she supposed to be a piece of a rib. She was in great pain, and, being much alarmed, sent hurriedly for assistance. The surgeon who came introduced his finger into the pharynx, but found no foreign body there, in the larynx, or orifice of the œsophagus. Before leaving her he made her swallow several pieces of bread, to assure himself that there was no obstructive body. As the distressing symptoms continued, I was asked to examine her. When she came to me she talked in rather a husky tone of voice; said she was choking, and could swallow nothing—not even her saliva—without much suffering. The pain extended up the left side of the neck and back of the head; with some tenderness over the posterior part of the thyroid cartilage on the left side. There was occasionally some nervous gasping for breath, but no absolute dyspnœa. Before introducing an œsophageal bougie, I made a laryngoscopic examination. I found no foreign body, but the mirror showed that the sharp end of some hard substance had lacerated the larynx. There was an ulcer about half an inch long and one-eighth of an inch wide, involving the left aryepiglottic fold and the mucous membrane over the arytenoid cartilage. She referred all the pain to this spot when I touched it. I refrained from passing a bougie over parts so much inflamed, and merely explored the entrance to the œsophagus with my finger, where I found nothing; and then directed my treatment to the healing of the wound. In proportion as this progressed favourably, so the symptoms which distressed the patient diminished. She swallowed with more and more comfort, and at the end of a fortnight, the ulcers being entirely healed, she did so with perfect ease. If I had not seen by the laryngeal mirror the lesion of the larynx, I should probably have made repeated explorations with the œsophageal bougie, and thereby have so irritated the already wounded part as to prolong the patient's suffering, instead of affording her relief.

The persistency of pain after the passage of a foreign body is, of course, well known, and those who have much experience in such cases will call to mind the constant applications of the patient to have the œsophagus once more explored for a foreign body which former repeated investigations have proven not to be there.

Doubtless in some, if not in many, of these cases some laceration exists to account for the trouble, and sedative remedies effect a cure which cannot be obtained by the passage of an instrument. If, on the other hand, there be a foreign body at the entrance to the air-passages, the introduction of an instrument may only drive it further onward, and fix it more tightly. In a good many cases foreign bodies become lodged in the hyoid fossæ or about the ventricles of the larynx, and the impaction of the edges in the ventricles sometimes renders their removal an exceedingly delicate and difficult operation. Dr. Morell Mackenzie reported a case before the Pathological Society, some years since, of such a nature. In his case the foreign body was also a thin lamella of bone from a sheep's head, measuring

three-quarters of an inch in length, and half an inch in width. This had become horizontally impacted, with its long diameter across the larynx, extending three-eighths of an inch into the right ventricle, and a quarter of an inch into the left. The patient was seen three days after the accident, and a portion of the bone was removed by the laryngeal forceps. Tracheotomy was performed about a week afterwards, owing to very urgent dyspnœa, and subsequently a fortnight after the accident, Dr. Mackenzie passed a blunt hook under the bone with the aid of the laryngoscope. By this means he broke the bone in the centre, and so removed the separate pieces. Professor Tobold mentions a case which came under his treatment where a triangular piece of bone, of about the same size as that in my case, became wedged in the left ventricle, where the greater part of it was buried. Dr. Tobold removed it four days after the accident. The ends of the bone were driven deeply into the anterior and posterior walls of the larynx, so that it resisted all attempts at removal with the forceps. Dr. Tobold then bent a laryngeal probe into a blunt hook, and by this means, dislodging one end of the foreign body, the patient was enabled to cough it up. In my case the bone was more deeply situated than in the two cases quoted, the greater part of it being below the vocal cords. Judging from the fact that the dyspnœa was greatest during the first few days, while subsequently it ceased to be so distressing, it seems not improbable that the bone may have altered its position, and that by the strong inspiratory efforts of the patient it may have been sucked into the very centre of the glottis, where it eventually became so tightly fixed. Although this position of the bone, suspended above the trachea midway between the vocal cords, afforded a tolerably free passage for air, yet it caused its removal to be very difficult and not free from danger, as any rough manipulation might have moved it obliquely across the larynx, to the immediate suffocation of the patient. It would have been impracticable in my case to break or cut the bone, as was done with such good results in Dr. Mackenzie's, as, situated as it was, there was nothing to prevent the separated fragments from falling into the trachea. The hook, made out of a laryngeal probe, which I used, proved of assistance to me in moving the bone, and I consider it a valuable instrument in such cases. I had not read Dr. Tobold's case at the time, and I constructed it to meet an emergency, as he did. I see that he speaks highly of it in his paper. It is so delicate that it may be introduced into the narrowest parts, and by it a great amount of force may be exerted upon any portion of a foreign body one may choose, so as to loosen or dislodge either end of it, or so alter its relation to surrounding parts as to render its extraction more easy.

In conclusion, I must revert to the good results I obtained from the medical treatment I employed to reduce the inflammation and swelling of the tissues. If I had not been able to effect this, I doubt if I could have removed the bone excepting by opening the trachea.

Brook-street, Grosvenor-square.

CASE OF

STRANGULATED INGUINAL HERNIA: HERNIOTOMY; RECOVERY.

BY SURGEON G. F. WHATELY, R.N.

(*Communicated by the* DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE NAVY.)

WM. HY. B——, aged thirty-two, fisherman by occupation, a native of Newfoundland, was received on board H.M.S. *Eclipse* at Chateau, Labrador, on Sept. 30th, 1876, in a prostrate and emaciated condition, suffering from the following symptoms of intestinal obstruction—namely, great anxiety of countenance; moist, clammy skin; pulse 96, feeble; tongue coated by a dirty-white fur; frequent and continuous vomiting of stercoraceous matter; cutting and dragging pains in abdomen, and constipation. These symptoms commenced six days previously. On examination of the abdomen, which was somewhat distended and tympanitic, there was found to be a complete inguinal hernia on the left side descending into the scrotum, tense, elastic, and yielding; no impulse on coughing; great pain and tenderness produced by manipulation.

I placed the patient under chloroform, and tried taxis for five minutes, but with only partial and temporary disappearance of the hernia, probably into inguinal canal. An operation being imperative, and no medical relief being obtainable on shore, it was necessary to obtain the captain's sanction to his being treated on board, as the ship was under sailing orders; this was granted.

At 11 P.M., patient being placed under chloroform, I operated in the usual manner by an incision in the long axis of the hernia. On reaching the sac it was found to be gangrenous, being very friable and shreddy. Such being the state, I opened the sac, and disclosed a knuckle of small intestine about the size of a peach, elastic, claret-coloured, and glistening, evidently retaining its vitality. On inserting the finger, I found the constriction to exist at the internal ring (which was much dilated), consisting of some bands of recent adhesions binding the gut to the neck of the sac. These were readily broken up by the finger, allowing the gut to be returned to the abdomen. The edges of the wound were then drawn together by silk sutures, and dressed with weak carbolic acid lotion, and the whole confined by a compress and spica bandage. Slight venous hæmorrhage only accompanied the operation. Ordered two grains of opium, and two ounces of port wine.

Oct. 1st.—8 A.M.: Passed a good night. No vomiting since operation. Aspect tranquil; skin moist and cool; pulse quiet. Expresses himself as easy, free from pain, and very hungry. Passed much flatus per anum. Ordered one grain of opium every six hours. Diet: Beef-tea and arrowroot.—7 P.M.: Has been sleeping during the day. Complains of aching pain at seat of wound, most intense with the bladder distended; much relieved by micturition.

2nd.—Dozed a good deal during night. Pulse 76; temperature normal; tongue clean. Is very hungry. Aspect brighter. Pain in bowels and seat of wound greater. Complains of desire, with inablity, to pass urine. Bandage and compress removed. A slight discharge of bloody serum on dressings; edges of wound contiguous, surrounded for about three-quarters of an inch by a reddish blush. Left testis retracted to pubes; some tenderness along cord. Has slight cough, with muco-purulent expectoration. Lower suture removed to give free exit to discharge. Urine drawn off by catheter twice a day, giving great relief to pain in abdomen. Cough mixture ordered to be taken occasionally. Wound to be dressed with lint soaked in dilute Condy's lotion, and covered by a large linseed poultice.

3rd.—Slept fairly. Expresses himself as much better. Is still unable to micturate. Wound discharging bloody serous; the redness around is much the same as yesterday, probably kept up by sutures. Upper suture removed. Has still occasional cough, with muco-purulent sputa. Bowels confined, giving rise to some mental distress. An enema of turpentine administered, and repeated in two hours, resulting in a copious discharge of scybala. Urine drawn off twice a day. One grain of opium at bedtime. Continue treatment.

4th.—Feels easy; free from pain and very hungry. Passes his urine naturally. Wound granulating at upper half; edges somewhat gaping below; redness diminished. Continue treatment.

5th.—General condition good. Wound more healthy-looking; in its base at lower half is a black-looking substance, probably the gangrenous sac; redness diminishing; discharge more purulent. Continue treatment. Diet: Boiled fowl, bread, beef-tea; port, 2 oz. daily.

7th.—Bowels well moved by an enema of turpentine. Is progressing favourably. Gangrenous sac still sloughing in poultice; redness around wound gone.

8th.—Wound granulating at upper half; a piece of sphacelated sac the size of a shilling came away in poultice this morning.

9th.—Wound looks healthy; granulating and discharging pus; in all respects improving; cough slight. Omit poultice; wound to be dressed with diluted Condy's lotion.

10th.—Bowels moved naturally. Wound granulating rapidly.

17th.—Wound healed. The *Eclipse* having arrived at St. John's, Newfoundland, patient is discharged to the civil hospital for a few days' rest, and ordered to wear a truss in future.

The following imperfect and brief history was obtained from the patient:—That he has suffered since infancy from occasional swelling in left groin, which has disappeared on his lying down, sometimes drawing up the testis with it; that he has never worn a truss nor applied for medical advice; that last February he suffered from symptoms similar to the present, but recovered after three days' rest in bed. He attributes the present attack to a strain from rowing on Sept. 24th, as the symptoms commenced on that day. From these facts it seems that patient has been the subject of a congenital reducible inguinal hernia, which, on the present occasion, became strangulated through inflammation at the neck of the sac.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

CASES OF COMPOUND FRACTURE IN WHICH THE WOUNDS WERE CLOSED WITH COMPRESSES SOAKED IN COMPOUND TINCTURE OF BENZOIN.

(Under the care of Mr. BRYANT.)

THE subjoined notes form a continuation of the report of the series of cases of compound fractures treated by closing the wound as soon as possible after the accident with lint saturated with compound tincture of benzoin.

CASE 5. *Compound fracture of leg; bone protruding; wound sealed with lint soaked in the compound tincture of benzoin; recovery.*—James H. J——, age twenty-three, a labourer, was admitted July 3rd, 1872, with a compound fracture of the left tibia following a fall with a sack upon his back. The wound was a large one over the lower third of the bone, and the bone projected. Reduction was effected, and wound sealed with lint soaked in the compound tincture of benzoin. Splints were applied, and the leg was swung. Not one bad symptom appeared. The dressing was removed in five weeks, when the wound had healed, and the man left the hospital on August 23rd with immovable splint.

CASE 6. *Compound fracture of the right leg; wound sealed with compound tincture of benzoin; simple fracture of left leg; cure.* (Reported by Mr. H. Liddell.)—R. I. S——, a carman, aged fifty-two, was admitted on the 5th March, 1874, with a compound fracture of the right tibia near the ankle, there being two wounds, and fracture of the left tibia in the lower third. The right leg was put on a back splint, the wounds being sealed with lint and compound tincture of benzoin. The left leg was covered with wet lint to keep down the swelling.

The patient did not sleep, and complained of great pain and numbness in both limbs, which continued for two days, when the left leg was put in back and side splints. After this he felt more comfortable; there was very little pain in his right leg, except when he tried to move his toes.

March 10th.—He felt much better; his bowels, which had been rather confined, were opened, and he felt relieved.

12th.—The splints on the right side were reapplied. He complained of little or no pain, and was progressing favourably.

On the 24th the wound was looked at for the first time since his admission, and it was found almost healed. There was very little discharge; and on the 6th April the wound had closed, and the limb was treated as a simple fracture.

April 14th.—The left leg had recovered entirely.

19th.—The man was out of bed for the first time, both legs being in gum-and-starch bandages, which were very comfortable.

May 7th.—He was able to walk without crutches, and left the hospital.

CASE 7. *Compound fracture of tibia; wound sealed with the compound tincture of benzoin; recovery.* (Reported by Mr. H. Liddell.)—Philip S——, a lighter-boy, fourteen years old, was admitted on the 10th March, 1874, with a compound fracture of the tibia. There was a wound on the inner side of the left leg, about the centre of the tibia, in which the end of the lower part of the tibia could be seen bared for about three-quarters of an inch. The boy was jumping from one barge to another in motion, when he slipped, and fell on the side of the barge, his leg being crushed between the two.

March 11th.—The bones could only be reduced by sawing off the end of one fragment; the parts were then brought into fair position, the wound being sealed in the usual way with compound tincture of benzoin, and fixed in splints. He was unable to sleep after, and had a subcutaneous injection of morphia, which gave him rest. He had only very slight pain in his leg, and some throbbing, but it bled slightly the following morning, and he seemed to be relieved.

The wound was dressed on the 15th. Temperature 99·4°; pulse 116. He seemed comfortable, and again on the 17th when it was syringed out, but there was very little discharge. There was considerable redness round the edges of the wound, but granulations were forming well. Bone appeared at the bottom, the upper fragment projecting inwards, and the lower outwards. The following night he complained of much pain in the leg, the limb being very tender, and this continued till the 27th, when he was quite free from pain, there being scarcely any discharge.

April 4th.—The discharge increased, as did also pain, keeping him awake part of the night.

14th.—Some exfoliation of bone, due to the periosteum having been peeled off the bone at the time of the accident, and becoming entangled in the soft tissue around. There was some malposition of the fragments, the crest and inner surface of the tibia being visible at the wound.

27th.—The heel was a little sore.

May 14th.—He was progressing favourably, being in good spirits.

June 6th.—The exposed bone was looking black and necrosed at one corner. He was able to get up, wheeling himself about the wards.

15th.—The piece of projecting bone was removed. He was up in a chair the following day, no worse for the operation.

25th.—The wound had been healing slowly. Slight bleeding occurred on the 23rd, but soon ceased. There was another piece of necrosed bone close to the surface, which was removed. After this the wound healed very rapidly, looking healthy.

July 3rd.—The patient left the hospital.

Oct. 4th.—Quite well. No shortening. No pain in walking.

CASE 8. *Compound comminuted fracture of left humerus from rifle-ball; wound sealed with compound tincture of benzoin; recovery.* (Reported by Mr. H. Stedman.)—John Y——, aged twenty-six, a Volunteer bugleman, was admitted on May 15th, 1871, with a severe gunshot wound of his left arm. He had received the injury four hours before his admission, when marking at the rifle-butts. The bullet had passed completely through his arm, about the middle of the upper third. The humerus was splintered into pieces, but no large vessels or nerves were apparently injured. The wound of entrance was much smaller than that of exit.

Mr. Bryant, who saw him within six hours of the accident, washed the wounds, covered them over with lint soaked in the compound tincture of benzoin, and fixed the arm upon a posterior and outside zinc splint.

No constitutional disturbance followed. On the tenth day (May 25th) the wounds were dressed, some little discharge of blood-stained serum exuding from the posterior one. The anterior wound had almost healed.

On June 3rd some bleeding took place during the dressing of the arm. The bleeding was checked by the application of ice and pressure; a slight recurrence took place on the 7th. Quinine was ordered three times a day.

On June 15th the posterior wound had nearly healed; the anterior was closing; exuberant granulations protruded from its orifice.

On July 7th a free discharge of pus took place from the posterior wound.

On July 12th a free incision was made over the posterior part of the arm to let out some matter, and again on the 27th; great relief followed this measure.

On August 2nd he could get up; and by the 20th he left, convalescing.

He was seen in January, 1872, with a thoroughly sound arm, the wounds having closed two months before; he could do anything with the arm.

SEAMEN'S HOSPITAL, GREENWICH.

CYSTIC TUMOUR OF THE LEFT SEMINAL VESICLE; UNDESCENDED LEFT TESTICLE.

(Under the care of Dr. RALFE.)

WE are indebted for the notes of this case to Mr. H. Murphy, M.B., the house-physician.

J. J——, aged twenty-eight, was admitted August 8th, 1876, suffering from an enlargement of the lower part of the abdomen. With the exception of an attack of fever five years ago at the Cape of Good Hope, his health had been good. He stated that he was married, and had had one child. The left testicle had never descended. Family history satisfactory. The present illness began four months before admission, when at Suez, on the voyage out to India. The earliest symptom was pain in the hypogastrium, and then the presence of a small tumour in the median line just above the pubes. At this stage he first experienced difficulty of passing urine; a catheter was employed on several occasions, and the difficulty passed off and never recurred. The tumour slowly increased in size. On the return voyage he was invalided at Malta and sent direct home. He stated that during the last ten days the tumour had grown rapidly.

On admission the expression was anxious; habit spare; he said that he was weighed five months ago, and has since lost two stone. He had no appetite, and suffered greatly from thirst. The bowels acted very little; no blood had been observed in the motions, but for the last month they had been very small, and often some jelly-like stuff was found with them; tongue coated; lungs healthy; heart-sounds rather distant, no murmurs; very little sleep, on account of the abdominal pain; urine acid, with a trace of albumen, but it was passed quite naturally and not too frequently. He had only one testicle in the scrotum—the right,—the left could be felt in the canal. The tumour extended up from the pelvis to the umbilicus, reaching laterally three inches and a half on each side of the median line; it was smooth, rounded, and immovable, feeling quite solid, very painful and tender. The superficial epigastric veins on each side were enlarged and tortuous, especially the right; no varicose veins or œdema of the legs. In the morning there was vomiting.

Aug. 12th.—Bowels confined. Enemata of water used with slight effect. Hypodermic injection of morphia begun.

16th.—Tenesmus. Bowels do not act, even with enemata; vomits everything a few minutes after swallowing; vomiting not fæcal. Above the tumour abdomen very tense and tympanitic; pain intense; emaciating considerably.

He died August 31st.

Post-mortem examination, Sept. 1st.—In the left pleura a few old adhesions; lungs congested posteriorly. The pericardium adherent with the heart weighed 11 oz.; valves healthy. Peritoneum black almost all over, many firm adhesions throughout. Stomach and intestines distended with gas. Liver, 60 oz.; soft, rather oily. Spleen, 2½ oz.; diminutive, healthy. Kidneys, large, white, mottled with stellate veins on the surface; left, 9 oz.; right, 8 oz. Pelvic and lumbar glands small, healthy. Left testicle at upper part of spermatic canal, small.

A large tumour occupied the middle line extending up from the pelvis to a little above the umbilicus, and laterally into the iliac fossæ to a slight degree. Peritoneum and intestines everywhere adherent about it. The walls about a quarter of an inch thick, very soft, ruptured in many places during removal. Adherent to its inner surface was a layer of soft fibrin one and a half to two inches thick, and in the sac a quantity of bloody serum. The cyst was unilocular. The bladder was small and flattened; it lay in front of the lower part of the tumour behind the pubis; its walls were quite healthy. The rectum empty and compressed against the pelvic brain. The vasa deferentia passing from the spermatic canal coursed along the front of the tumour on each side, curving backwards and downwards over its upper end to the seminal vesicles. The left seminal vesicle was large and nodular, and closely connected with the tumour, at its back and lower part. The tumour lay behind the prostate, between the bladder in front and the rectum and seminal vesicles behind. The right seminal vesicle was unaffected.

QUEEN'S HOSPITAL, BIRMINGHAM.

LARGE RETRO-UTERINE HÆMATOCELE; INCISION; RECOVERY.

(Under the care of Mr. JOHN CLAY.)

FOR the following notes we are indebted to Mr. Hugh W. Thomas, obstetric assistant.

It is seldom that we are enabled to get such beneficial results as followed the surgical treatment chiefly adopted in the following case.

A married woman, aged twenty-four, was admitted on August 29th, 1876. She had three children, the youngest of which was twenty months old and was suckled until a month before admission. Her labours had always been good and without complications. Menstruation occurred at the end of a month after the last confinement, and appeared regularly afterwards. During her last menstrual period, about a month since, while engaged in washing the yard, she was suddenly attacked with a violent pain in the back, and in the hypogastric and right iliac regions, where the pain was most acute. She had frequent attacks of pain after this of a spasmodic character, which were generally more severe during the night, and were accompanied with distressing dysuria. There was a free menstrual discharge during the whole of the month previous to admission. A fortnight before she had rigors, accompanied with nausea and vomiting, and was compelled to take to her bed. She then discovered a painful swelling on the right iliac region. This, according to her belief, gradually increased in size.

On admission she was anæmic and emaciated; the recumbent posture only possible; legs not drawn up. Abdomen tender on pressure. Pains in the regions previously mentioned. In the right iliac region there was a firm swelling of the size of a large orange. The upper border of this swelling was irregular, and could be traced in an oblique direction, running from the right iliac crest to the middle of the left groin. Below this line the abdomen was dull on percussion, and the swelling was nodulated, and the boundary-line of the latter was about an inch and a half from the umbilicus. There was a free vaginal discharge of a dark rusty colour. Per vaginam a hard rounded mass was felt completely filling Douglas's space, and pushing the uterus downwards and forwards, simulating in feel and size a gravid uterus of the fourth month in a retroverted condition. The sound was introduced into the uterus without difficulty. The uterus measured three inches, and was in its normal position. Per rectum the mass could be distinctly felt, and the bowel was pushed down in folds. Tenesmus and dysuria very distressing. Pulse 100; temperature 101°. Salines and opiates ordered.

Sept. 5th.—There is an increase in the size of the swelling, and it feels firmer. The upper border is now felt to be on a level with the umbilicus. Abdomen tender on pressure. Pulse 98; temperature 101·4°. Quinine mixture prescribed; opiates continued.

9th.—The abdomen extremely tender and tympanitic. Peritonitis obvious. The aspirator was used to the vaginal swelling, but only a little thick blood followed. Pulse 140; temperature 102·6°.

10th.—Abdominal pain and tenderness increased. Knees drawn up; countenance anxious. Pulse 140; temperature 102°. Consultation convened, at which Drs. Heslop and Mackay and Mr. Clay attended, in reference firstly to the probability of the extravasation being due to tubal fœtation; and, secondly, as to the advisability of evacuating the extravasated blood per vaginam by a free incision into the tumour. The first question, after mature consideration, was not considered very probable, and it was deemed advisable to defer the latter.

11th.—10 A.M.: Patient states that she feels better. Abdomen, however, more tympanitic; no sickness. Pulse

132; temperature 103°. To take of acetate of morphia a quarter of a grain every four hours. Compresses wrung out in iced water to be kept applied to the abdomen. It was decided to have a consultation in the evening. 7.30 P.M.: Patient much worse in every respect, vomiting and hiccough; abdomen enormously distended. Pulse 142°; temperature 103°. It was determined to incise the tumour without further delay. Mr. Clay, with a guarded bistoury, made an incision of about one inch and three quarters in length into the centre of the vaginal swelling. The finger was passed through this opening, and the clot broken up by this means; about two pounds of hard offensive clot and coloured liquid were removed. The cavity was carefully syringed with diluted Condy's fluid. The same quantity of morphia was prescribed with a small quantity of brandy every two hours. After the incision and syringing the boundary line of the solid mass was felt to be about two inches nearer the pubis.

12th.—Patient has had two severe attacks of abdominal pain. After the operation a discharge of bright red blood continued to escape from the vagina, probably from a vessel in the incision, which was arrested by a plug introduced by Mr. Allen at 3 A.M. Urine and flatus passed in large quantity during the night. Tampon removed and cavity syringed out with diluted Condy. Temperature 103°; pulse 136. Morphia continued. Insufflation of the cavity ordered every three hours with salicylic acid.

13th.—Bowels moved three times during the night; abdomen very much diminished in size. Pulse 120; temperature 102°.

On the 14th a large quantity of dark offensive clots were removed by syringing the cavity with Condy's fluid, from which she felt much relief. The pulse and temperature daily declined until they became normal. No trace of fœtal development was discovered, although careful examination was daily made of the débris brought away by syringing. Salicylic acid was administered for several days in ten-grain doses with the best results. Quinine was afterwards substituted. By the end of the month she was quite convalescent, all traces of the abdominal hardness having disappeared, and the incision quite healed. She remained, however, anæmic, but with the use of tonic medicines and a generous diet she made a most rapid and permanent recovery. Menstruation had not occurred when she left the hospital for the Convalescent Institution.

In commenting on this case, Mr. Clay remarked that it was one of unusual interest, not alone for the special clinical features it presented, but as illustrating the mode of treatment to be adopted where large extravasations of blood into the cavity of the abdomen had taken place. Of late years the current of opinion has gone somewhat in the direction of leaving these large sanguineous extravasations to become removed by absorption aided by therapeutical measures. There are, of course, those who advocate surgical interference, and the favourable result of this case lends a powerful support to the adoption of this method of treatment in certain cases. There can scarcely be a doubt that in the progress of this case fresh extravasations occurred, which materially increased the size of the tumour. It might have been thought that the temporary increase of size was due to a distended bladder, but it is scarcely necessary to observe that this source of error was carefully guarded against. The opening of the tumour at too early a period of its development would probably have been a fatal mistake. The prudence of the delay sanctioned by the gentlemen engaged in the consultation in the first instance was shown by the fact that the peritonitis set up had completely encapsulated the clot, and thereby facilitated dealing with it after the tumour had been incised. There was no softening of the clot. The fragments which came away were firm, offensive, and dark-coloured, and to have delayed the incision would have ensured the death of the patient. Another fact of importance is that the convalescence is considerably shortened. The employment of salicylic acid as a local antiseptic was only partially successful, in consequence of the large amount of blood to be acted upon, but its internal administration was marked with the best effects. The rapid diminution of temperature, pulse, and meteorism in the first twenty-four hours after the incision are worthy of prominent notice. The lesson which this and other similar cases had taught him was not to expect large extravasations to be removed by absorption. That such cases should not be interfered with surgically at too early a period is a safe proceeding, but that they should be watched, and, whether softening takes place or not, if the temperature and the pulse show extensive abdominal complications to be taking place, then at once to make an opening for the congulated blood. The tolerance of such large continued doses of morphia is also worthy of note. The position and feel of the tumour on the right side of the abdomen lent a powerful impulse to the belief at one time that the origin of the extravasation was due to a rupture of a tubal pregnancy, but no traces of a fœtal development could be found. There was besides no history of shock, which generally occurs in such case, and this fact, together with the absence of certain uterine symptoms, were rightly held to negative the supposition.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE ordinary meeting of this Society was held on the 28th ult., Sir James Paget, President, in the chair. An interesting discussion arose out of a case of congenital absence of the upper limbs, related by Mr. Hulke; arrest of development, aided perhaps by pathological changes, as suggested by Mr. Wood, and separation of limbs from constriction *in utero* by bands of lymph, were the causes assigned for such malformations. A paper by Mr. Morrant Baker followed, on a new form of flexible tracheotomy tube, which has already been used with success in several cases. Mr. Hulke, in another communication, illustrated one of the dangers arising from tracheotomy tubes, and pointed out some disadvantages presented by Durham's tube as compared with those of more simple construction. Mr. Durham defended his tube from Mr. Hulke's strictures, which, he said, only applied to instruments of bad construction, such as the one in the use of which the accident had happened. Messrs. Howse and Marsh also spoke. A collection of the different varieties of tracheotomy tubes was exhibited by Mr. Hulke, who pointed out their respective features at the close of the meeting.

Mr. J. W. HULKE read a paper entitled "Case of Complete Absence of both the Upper Limbs, and of Faulty Development of the Right Lower Limb." The child described in this paper, Mary B——, is four and a half years old, and excepting its deformity—viz., absence of both upper limbs, and faulty development of the right lower limb—is a well-grown, healthy, pretty, and intelligent blonde, the youngest of four children, none of whom, except herself, have any bodily peculiarity, and her father and mother are both well-formed and healthy. The clavicles and scapulæ appear well formed, and the muscles attached to them act vigorously. There is no external mark, except a minute congenital scar and a little dimple below the outer end of the right collar-bone. When placed upright on her left foot, the right foot does not reach the ground by several inches, but the thigh is plump and the leg well shaped, though smaller than the left. The foot has slight talipes equino-varus, the femur is short and misshapen, but its mobility upon the pelvis is great in abduction and circumduction, the knee-joint is loosely knit, the axis of the tibia rotating upon the lower end of the femur both in its flexion and extension. The left lower limb is perfect, and dexterously performs offices usually devolving on the hands. She readily grasps and holds even small objects with the foot, can pick up a comb, arrange her hair, feed herself with a spoon, and even use her needle with it. The author thought that, passing by the vexed question of the influence of maternal emotion, the case supported the theory of absence, arrest, or misdirection of development rather than

amputation of already formed limbs by constriction; the small scars and appendages which are often present being the only evidence in favour of the latter hypothesis. The total absence of scar in this case from the child's left shoulder excludes absolutely the notion of amputation, and the scar and dimple on the right shoulder imply that here a limb-bud had begun to grow out, but was blighted in its inception; the defects in the right lower limb signifying a still later disturbance of development; whilst the equino-varus may be regarded as an exaggerated continuance of the normal condition of the foot at birth, which has the sole turned slightly inwards.—Mr. LOWNE said that some years ago he had dissected several examples of similar malformations, and had found in them every variety of atrophy, generally of the distal portion of the limb. In nearly every case, whether in animals or man, the shoulder-girdle persisted. In one specimen at the College of Surgeons all four limbs are absent, yet, on dissection, some trace of a femur on one side was found, and muscles which should be attached to the tibia were present, but higher up in the limb. In these cases the bones are often wanting, but the muscles persist, and have abnormal attachments. In the College collection there is a specimen of the hip of a wild boar, with a nipple-like projection composed of a low form of connective tissue and skin, as if, the arrest taking place early in fœtal life, growth had continued without differentiation of tissue—a condition differing from other examples, where the differentiation of parts proceeds, but growth is arrested. He believed that in every instance a small papilla, or dimple, occurs on the stump, marking out the position of the limb, showing that the limb-buds are developed. These facts disprove the theory of intra-uterine amputation by means of the umbilical cord, and to them may be added the common occurrence of the cord being twisted round the neck of the embryo without any severing of the parts. Mr. Lowne concluded his remarks by reference to an instance in which two mothers, residing in the same house, when about six weeks advanced in pregnancy, were both subjected to fright caused by one of their husbands having had his arm torn off by a machinery accident. The fears which these two women entertained that they would bring forth malformed children were not realised, the infants being perfectly well-formed. He thought that there was little to prove the fact of parental impressions.—Mr. JOHN WOOD thought that some of these malformations were, like anencephalous monsters and cases of ectopia vesicæ, ectopia cordis, &c., evidently due to pathological changes in the ovum. He referred, in support of this, to Mr. Buckland's experiments on salmon ova, in which it was found that arrest of development of the head or tail could be produced at will by placing a small fragment of dust upon either of these parts in the embryo; and in like manner even the union of two embryos, and the resulting development of a double monster could be produced. Some slight inflammatory condition in early fœtal life might, by leading to morbid adhesion of parts, lead to the arrest in growth of the part involved. To some such condition he had been accustomed to refer the production of ectopia vesicæ and epispadias, where all the structures forming the allantois and bladder are coherent, and a gap is left between the penis and umbilicus, the umbilical cicatrix being wanting. Similarly some inflammatory formation at the time of the budding of the extremities might lead to arrest in the development of the limb. He concurred in not attributing any of these cases to amputation by means of the umbilical cord.—Mr. MORRIS, in support of the view that these cases are due to arrest of development, instanced an example where the ulna and some of the digits were wanting, the radius being perfect; and another, recorded by Velpeau, where the femur was present, but the rest of the lower limb absent. Nor did the shoulder-girdle always persist in its entirety, for there are cases in which either the sternal or (more frequently) the acromial end of the clavicle is absent. He inquired of Mr. Hulke whether, in his case, the muscles bounding the axilla—the pectoral and the latissimus—were present.—Mr. D. NAPIER recalled a case, which he had seen some years ago, of a child in whom there was absence of the humerus and bones of the forearm, but who retained perfect movement of the fingers of the hand, which was present. — Mr. WOOD remarked that it was quite possible that the interference to development might affect only the bones, the muscles remaining and having abnormal attachments.—Mr. T. SMITH thought it scarcely conceivable that the umbilical cord should be the cause of constriction of the limbs sufficient to lead to their amputation without the circulation within it being greatly interfered with. But undoubtedly some cases of intra-uterine amputation did occur, however produced, for he had seen limbs marked by deep constrictions through the soft parts as only could have resulted from ligature; and in one case the limb was all but amputated. Instances in which portions of a limb were wanting, with preservation of the most distal part, could not be explained upon Mr. Wood's hypothesis. He had, for example, seen a case in which the foot was directly appended to the pelvis. Mr. Lowne had spoken of "parental" impressions; did he imply that the father had any influence in producing malformation? and with regard to the instance quoted by Mr. Lowne he would like to know what was the age of the mothers when submitted to the shock. He narrated an instance—the converse of that quoted by Mr. Lowne—which was personally known to him, in which the mother, a well-educated lady, had, when pregnant, been startled by being addressed by a tradesman who had a cleft palate, but her faith in the efficacy of prayer had led her to feel certain that her child would not have this deformity; but the child was born with hare-lip and cleft palate.—The PRESIDENT said that it was impossible to doubt the occurrence of intra-uterine amputations, the number of facts collected by Sir James Simpson being incontrovertible; for not only are limbs sometimes found which have apparently been amputated, but there are others in which amputation has all but taken place. In some instances the stump is as perfect in all its structures as if amputation had been performed after birth, and the museum of St. Bartholomew's Hospital contained a specimen in proof of this. Sir James Simpson did not attribute any part in the amputation to the umbilical cord, but to bands of lymph due to inflammatory changes, causing constriction of the limbs. Thus, although arrest of development explains several cases, yet many must be considered to be due to amputation in utero.—Mr. HOWARD MARSH remembered well one of the cases referred to by Mr. Smith. In that case three of the limbs were marked by deep constrictions, and one was nearly amputated in two places—viz., by a deep furrow close to the bone, just above the ankle, and a less deep constriction higher up in the leg.—Mr. HULKE said that he did not mean to imply that all cases of this malformation were instances of blight, for he had no doubt of instances of intra-uterine amputation where the withered member is found in the fœtal membranes. In reply to Mr. Morris, he believed that both the pectoral and latissimus muscles were present in his case.

This was followed by a paper "On the Use of Flexible Tracheotomy Tubes," by W. MORRANT BAKER, F.R.C.S. The evils which so frequently result from the use of silver or other rigid tracheotomy tubes are well known. Pain and difficulty in their introduction and withdrawal, and more or less bleeding, are common; while ulceration of the trachea from pressure is frequently found after death, and in many instances has been the cause of the fatal result. Cases in illustration of these facts are quoted from various authors, and the endeavours which have been made to remedy the evil by altering the construction of the tube are referred to. The author then describes a tracheotomy tube which was made at his suggestion by Mr. Millikin, under the superintendence of Mr. Paley, house-surgeon to the Evelina Hospital for Sick Children, and which he believes will be found to possess all the advantages of a silver tube, without its disadvantages. It is constructed of vulcanised red india-rubber, and in shape and size resembles the ordinary tubes. Only one tube is used at a time, as it has been found quite easy of introduction and withdrawal; more so, indeed, than the innermost of the tubes on the usual double-tube arrangement. Hitherto, the elastic tubes have been employed at periods varying from one or two days to as many weeks after the operation; and they have been used continuously, in different cases, for periods varying from a week to six months. They should not, as a rule, be introduced until about three days after operation. In no case has there been any sign of obstruction on account of the tube yielding to the pressure of the edges of the wound in the trachea. It is necessary, however, to have always at hand, for an emergency, a simple trachea dilator or silver tube, especially during convalescence, inasmuch as, when the tube has been

left out for a few hours, there may be temporary difficulty in replacing it, on account of contraction of the wound. The elastic tubes have been found very durable, and while in use become less clogged with mucus than silver ones. They can be also cleaned as easily as the silver ones, or more so. Cases are quoted in which the flexible tubes have been employed at the Evelina Hospital, St. Bartholomew's Hospital, the Children's Hospital (Great Ormond-street), and St. Thomas's Hospital.

Mr. HULKE further contributed a paper "On a Case of Lodgment of a Tracheotomy Tube in the Right Bronchus, and its Extraction." The tube in this case was not an old one, which, by chemical action or friction, had broken from its shield, but a nearly new one, not previously used. The patient, H. D——, aged thirty-seven, was a tall, thin woman, admitted on July 29th last into Northumberland ward, Middlesex Hospital, with laryngitis. Her symptoms were so urgent that, with Dr. Greenhow's concurrence (in whose charge the patient was), immediate tracheotomy was performed. She at once breathed freely, passed a quiet night, and for a week her relief, interrupted occasionally by cough, seemed nearly complete. On Aug. 10th, whilst the inner tube was being replaced after cleaning, the outer tube slipped through the collar and shield, and she felt it slide from the wound deeply into her chest. Several attempts were made to seize the tube with slender long forceps, and other measures were adopted, but unsuccessfully. Direct interference was for a time deferred; Trousseau's largest tube was inserted, which was more comfortable, she said, than Durham's, and she breathed tranquilly, but felt pain at the right of the lower part of the sternum. Her cough grew more troublesome during the next few days, with pain on the left side; and by the 13th of August, her temperature being 103° F., and her pulse 120, the tube was evidently provoking inflammation. Its immediate removal seemed the only prospect of rescuing her. Chloroform was given, Trousseau's tube withdrawn, and a long piece of German silver wire (one end of which was bent into a blunt hook about one-eighth of an inch long, and the wire again bent at about an inch and a half above this at an angle, roughly estimated as that which the right bronchus and trachea include,) was passed through the wound down the trachea. The other end of the wire was bent in a large loop, the plane of which coincided with that of the tracheal end of the wire beyond the angle, and thus allowed it to be guided into the right bronchus. The tube was distinctly felt, and on the hook being slid onwards to the known length of the tube, it was slowly withdrawn, and from the resistance it was found that the tube was hooked, and was moving upwards. When near the tracheal wound the hook became disengaged, but the tube was here easily seized with a forceps and taken out, and Trousseau's tube re-inserted. The patient's temperature soon fell to 99°, and her pulse to 96, and on the 14th she felt, she said, very well, her cough was less troublesome, she breathed with ease, and had lost all pain and tightness in the chest. All threatening symptoms gradually disappeared, and on the 15th September she was discharged convalescent. She continued to use the tube till October 26th, when she returned to the hospital for a couple of days, the tube was taken out, and in forty-eight hours the wound had contracted so as scarcely to admit a small probe. She has continued free from tracheal embarrassment. Some critical remarks followed as to the cause of the screw in Durham's tube becoming loosened, and on the defect of the outer tube in having no flange to prevent it slipping through the collar and being drawn into the trachea. Other defects of Durham's tube noticed were the jointed composite structure of its inner cylinder, necessitating a great thickness of metal, and reducing thus its efficient lumen and allowing it to be more easily clogged by the mucus lodging on the ridges of the joints. Reference was then made to the necessity of forceps for extracting foreign bodies from the air-passages being light enough to serve as a sound, and flexible enough to be bent in any desired curve. Such forceps are figured by Gross in his "Treatise on Foreign Bodies in the Air-passages," published in 1854, but appear to be unknown to London instrument-makers. The benefits of the German silver-wire used were its flexibility combined with sufficient stiffness, and its angulated sectional figure, which made it superior to cylindrical wires previously tried. The author finished with some remarks on the circumstances which enabled him to conclude that the tube had lodged in the right bronchus, and with a description of a plan of operation mentioned in a German treatise on tracheotomy, by which the bleeding, usually of an embarrassing amount, was rendered comparatively insignificant.—Mr. DURHAM congratulated the author of the paper upon the success of his operation, but did not think that he himself should be congratulated upon the tube shown being a specimen of his invention. He referred to the dangers arising from ulceration in tubes of ordinary types, and described in detail the reasons which had led him to construct the lobster-tailed tube now known by his name, of which the principle was that it should have a short curve and dip perpendicularly down into the trachea. He contended that the tube shown was a badly constructed instrument, and believed that a tube constructed on the plan he had devised would not only not be liable to the accident that had occurred in the case read, but would also be free from any of the objections urged against it by the author of the paper, who could not have seen any properly constructed instrument, the bore of which was as large as other tubes, and not more liable to be clogged. He thought Mr. Baker's tube was likely to be useful, but that it should not be used at once after operation.—Mr. MARSH said that the flexible tube invented by Mr. Baker had been used lately at the hospital for Sick Children, Great Ormond-street, and had proved to be, as nearly as possible, an unqualified success. It had been used in four cases, did not readily clog, and could be taken out and replaced by nurses. He had found Durham's instrument open to objection from its costliness, its liability to get out of order and to be blocked up, and further, owing to its long projecting horizontal limb, it was likely to get into the way, and be tilted out of the trachea. He thought that in all cases Fuller's tube should be used, as being less expensive and safer than Durham's, but that Baker's instrument should be substituted for the rigid tube within forty-eight hours of the operation.—Mr. HOWSE thought all surgeons should be grateful to any inventor producing an improvement in the form of tracheotomy tubes. He was present in the ward when a tube ulcerated into the innominate artery, and the child bled to death in a few minutes. He pointed out that in all tubes the surgeon had largely to depend on the manufacturer; for there were some containing so little silver and so much alloy that they rapidly become corroded, and lead to the growth of granulations from the irritation caused by their irregularities. So might it be with Mr. Baker's tube, which, either by the cupidity or stupidity of manufacturers, might occasionally be made of an inferior kind of india-rubber containing more sulphur; so that the tube, being brittle, might be torn away from its collar and slip into the trachea. Mr. Bryant had that day enlarged an old tracheotomy wound which had become obstructed by granulations, in a patient who had worn a silver tube for ten years. He had, however, only worn it at intervals, for he was in the habit (and this was an additional argument in favour of Mr. Baker's tube) of raising money on his tracheal tube. On this occasion, however, he had been unable to redeem it, and, the wound closing up, he was obliged to seek relief at the hospital.—Mr. D. NAPIER pointed out that not sulphur, but antimony, is used in the manufacture of red india-rubber, which is the best for all surgical purposes.—Mr. MORRANT BAKER was glad to hear that the best kind of india-rubber was the red, which was that selected for his tubes, and he was informed that their durability must be considerable. He had pointed out in his paper the need for roughly testing their tenacity &c. before using them. He was inclined to agree with Mr. Marsh rather than with Mr. Durham as to the shape of the tube, and was sanguine that in time an elastic cannula would be devised for use immediately after tracheotomy, and the employment of metal tubes wholly disappear.—Mr. HULKE thought Mr. Baker's tubes bid fair to obviate many of the risks following the operation by the use of rigid tubes. In reply to Mr. Durham, he said that his criticisms upon the lobster-tailed tube were based upon the examination of very many examples of it and on inquiries of many makers. One great defect was that if the screw became loose the outer tube would slip off, as happened in his case, because it was not protected by any flange. Most of these tubes had no flange at all, and others only the merest rim to prevent such a mischance.

The Society then adjourned.

CLINICAL SOCIETY OF LONDON.

THE ordinary meeting of this Society was held on the 24th ult.; the President, Sir W. Jenner, occupying the chair. Three papers were read bearing upon the treatment of leucocythæmia and allied diseases by phosphorus—one by Dr. Gowers, on a case of lymphatic leucocythæmia, and two on cases of Hodgkin's disease with increase of white corpuscles in the blood, by Drs. Greenfield and Goodhart respectively. Sir Wm. Jenner added brief notes of three cases of splenic leucocythæmia. The meeting was numerously attended, but the discussion upon the cases read was deferred until the next meeting. Dr. Henry Thompson exhibited well-marked specimens of leucocythæmic blood from a patient now under his care at the Middlesex Hospital.

After the reading of the minutes of the previous meeting, the President demurred to their confirmation because the case brought forward by Dr. Broadbent was incorrectly styled leucocythæmia. Dr. Broadbent explained that the case should have been recorded as "lymphadenoma"; and this term having been substituted for "lymphatic leucocythæmia," the minutes, as revised, were duly confirmed.

Dr. GOWERS read notes of a case of Lymphatic Leucocythæmia treated by Phosphorus. The case was that of a lad, aged sixteen, a patient of Dr. Wilson Fox, in University College Hospital, and afterwards for a time under the charge of Dr. Gowers. He presented extensive glandular enlargements in the neck, axillæ, and groins, and evidence of a large mass in the mediastinum. The spleen was slightly enlarged and the temperature was uniformly raised several degrees. The blood presented a large excess of white corpuscles; their proportion to the red was as one to four. One hundred and four were counted in one field. The glandular enlargements had been noticed only three months. During a fortnight of expectant treatment little change was observed. Phosphorus was then commenced—one-thirtieth of a grain three times a day. A week's slight improvement was followed by an increase in all the symptoms, due apparently to some unwise exposure; but during the second fortnight of the phosphorus treatment there was a marked diminution in the number of white corpuscles. At the end of the fifth week they were reduced to a third of the original number, and the external glands were smaller and harder. A trace of albumen appeared in the urine, and, on account of obstinate diarrhœa, the phosphorus was omitted. The improvement in the special symptoms continued, and a week later only twenty-four white corpuscles could be counted in the field of the microscope, and the dulness produced by the mediastinal mass had sensibly diminished. The albumen in the urine, however, increased, fatty casts were found in it, and general œdema came on. The temperature fell, the patient became weaker, and finally died from asthenia, the number of white corpuscles showing to the last a progressive diminution. At the post-mortem examination, besides the external glands which could be felt, masses of agglomerated glands occupied both the anterior and the posterior mediastinum In front the mass occupied, above, the position of the thymus, and was adherent to the rib-cartilages and to the left lung; a still larger mass in the posterior mediastinum lay around the trachea and aorta, and had perforated the pericardium. The abdominal glands were also enlarged. Most of the glands were hard and fibrous, or else caseating. Under the microscope all showed lymphatic overgrowth and abundant leucocytes. In some it was undergoing fibroid, in others fatty degeneration. The spleen weighed thirteen ounces and a half; the Malpighian bodies had undergone lardaceous degeneration; it contained some caseous infarctions; its tissue was infiltrated with leucocytes. The liver was slightly enlarged, and contained abundant minute growths, most of which were undergoing fatty degeneration. The kidneys were large and pale, and their tissue presented general granular and fatty degeneration, with a few leukæmic growths. The marrow of a tibia was abundant, and consisted of leucocyte-like cells massed together. Dr. Gowers drew special attention to the degeneration in the glands and in the liver, which seemed to be indicated during life by the diminution in their size, and this coincided with the improvement in the state of the blood. The spleen presented no degeneration which could be associated with the diminution in the white corpuscles, since the Malpighian follicles are believed not to be specially concerned in the leucocythæmic process; hence it was probable that the leucocythæmia which existed was due to the glandular overgrowth, and not to the spleen. Renal disease was a rare complication of leucocythæmia, and it was further remarkable in this case from the acuteness of the process and the early evidence of fatty degeneration. What effect could be ascribed to the phosphorus? The known influence of phosphorus is to cause fatty degeneration, the condition found abundantly in this case. But such degenerations have occurred in cases in which no phosphorus was given, and with so acute a course and elevation of temperature degenerations are likely to occur. The process may have been hastened by the phosphorus, but if so the drug must be suspected of an influence on the kidney degeneration. In conclusion, Dr. Gowers said he had brought forward the case rather as suggesting points for future observation than as itself settling the questions it raised.

Dr. GREENFIELD read notes of a case of Hodgkin's Disease, with increase in the white corpuscles of the blood, treated with phosphorus. The patient was a young woman, twenty-six years of age, who had never been strong, though suffering from no special ailment until about two years before, when she attended as an out-patient at St. Bartholomew's Hospital under Dr. Duckworth for amenorrhœa. She stated that she had, at the same time, some glandular enlargement in the neck, but this appears to be doubtful. Some enlargement of the glands in the neck was noticed about January, 1876, and from that time there was complete amenorrhœa and gradually increasing debility, which at the last led her to seek advice. She was first seen by Dr. Greenfield at the beginning of May, and from that time till her death was under the care of Dr. Rogers, of Old-street, Dr. Greenfield seeing her in consultation with him. When first seen she was greatly emaciated; there was a mass of enlarged glands on the right side of the neck at the upper part, with some enlargement behind the sterno-mastoid; on the left side was corresponding though less enlargement, and there were also enlarged glands in the right axilla and in both groins. The patient suffered from hectic fever, with frequent perspirations. There were also curious attacks of dyspnœa, lasting a few minutes, which came on suddenly, often preceded by pulsation of the right carotid artery; then she suddenly became pale, half-unconscious, the respiration becoming very laboured and almost entirely abdominal. The right pupil was sometimes contracted during or after the attacks, and profuse perspirations frequently followed them. The spleen appeared to be slightly but not notably enlarged. The blood was not examined until later. Having in view the important results gained by Dr. Broadbent and Dr. Wilson Fox in leucocythæmia by the employment of phosphorus, Dr. Greenfield thought it would be desirable to try its effect in a disease which presented some analogies with it, and $\frac{1}{20}$ of a grain of phosphorus was therefore given three times daily in pill, and was continued for six weeks. Ten days later the blood, examined with a high power, showed a decided increase in the number of white blood-corpuscles, which appeared to be in the proportion of one white to fifteen red. There were also other white corpuscles smaller than usual, and a number of microcytes. The glandular swellings increased somewhat rapidly, and in the middle of June there was a large mass in the right axilla, the swellings in the neck had greatly increased, and there were masses of enlarged glands in the groins. The febrile attacks and perspirations continued unabated, and the patient became extremely emaciated and prostrate. The temperature, taken pretty regularly three or four times in the twenty-four hours, presented remarkable variations, the daily range extending over from four to six degrees Fahrenheit, and the elevation occurring very rapidly. On one occasion a rise from 98° to 103° was observed in four hours, and from 99° to 103° in five hours. The highest temperature observed was 105 5°, but temperatures of 104° to 105° were frequent, the highest usually occurring towards evening or at night, but with no great regularity. The patient lived for about four months, dying

early in August. During the greater part of that time the glandular enlargements increased, the emaciation was progressive, and after a temporary improvement the dyspnœa became a more or less persistent symptom. Towards the end of life the glandular swellings decreased in size, and some of them entirely disappeared. The temperature continued high, but during the last week of life it became low, rarely rising above 101°. Post mortem, there was found a mass of enlarged and indurated glands in the upper part of the right side of the neck; enlargement and induration of the bronchial and mediastinal glands, the mesenteric and lumbar glands greatly hypertrophied. There were two smallish nodules of new growth resembling indurated lymphatic gland in the structure of the liver. The spleen was but slightly enlarged and apparently free from patches of new growth, but was too much decomposed to permit of certainty on the point. There were scarcely any other marked visceral changes. Dr. Greenfield observed that the case was clinically a typical example of Trousseau's "adenie," "anæmia lymphatica," or "Hodgkin's disease." He thought that the increase in the proportion of white blood-corpuscles was not sufficiently large to allow it to be designated as a case of leucocythæmia, nor were there any of the usual symptoms of that disease, such as epistaxis or other hæmorrhage. At the same time the condition of the spleen was different from that which was observed in many cases, and regarded by Dr. Wilks as one of the essential anatomical lesions of Hodgkin's disease. The clinical features, however, were most typical: glandular enlargements, great and progressive, a peculiar anæmia, progressive emaciation, with irregular and high temperature. The condition of the spleen in five other cases which had fallen under his observation presented considerable varieties; in only two did it present the typical characters of containing masses of new growth, aptly likened by Dr. Wilks to lumps of suet. At the same time, the condition of spleen observed was equally inconsistent with typical leucocythæmia. Probably the case must be considered an intermediate one, and "anæmia lymphatica" would be the most appropriate name, rather than Virchow's "leukæmia lymphatica." In commenting more particularly on the symptoms observed, the author remarked that the earlier attacks of dyspnœa were probably due to pressure on nerves, the later to direct pressure on the trachea and bronchi by enlarged glands—a condition discovered post mortem. The phosphorus was observed to have had but little influence on the progress of the disease, the glandular enlargement continuing and increasing during its use; and the subsequent apparent atrophy of the glands being accounted for, in all probability, by their induration, a similar occurrence having been observed in other cases. Nor did quinine, which was given through a great part of the course of the case, appear in any way to prevent the febrile attacks. The other treatment adopted consisted merely in palliative measures.

Dr. GOODHART read notes of a case of Hodgkin's Disease, treated by Phosphorus. The patient, a female forty five years of age, married and without children, was admitted into Guy's Hospital under the care of Dr. Pavy, on June 7th, 1876. There was no family history of rheumatism, gout, or cancer. The patient had suffered from three attacks of rheumatic fever when seventeen years of age. Since then she had some oppression in the cardiac region, and of late had been subject to chronic bronchitis. Six years ago she had an attack of "inflammation of the kidneys" without dropsy. Twenty months before admission she had a boil on her thigh, which bled freely on being opened, and she had lost much blood; ever since then she had been weakly and pale. Fifteen months ago she was under treatment for fistula in ano, and after leaving the hospital she began to suffer from dropsy, which lasted till her admission in June—twelve months. The glands in the neck and armpits were noticed to be enlarged, but the enlargement did not persist. On admission she was anæmic, and the lower extremities were anasarcous. Temperature 101·2°; pulse 128. There was a discharge from a sinus left by an abscess which had formed behind the right ear. There were crepitant râles at the bases of the lungs, and a loud systolic murmur audible at the apex and base of the heart, but not in the back. The liver was enlarged, and some resistance on palpation in the right lumbar region. The spleen was not manifestly enlarged. Examination of the blood showed 60 white corpuscles to 100 red. Thirteen days after admission, phosphorus treatment was commenced in doses of $\frac{1}{70}$ grain three times a day. On the 14th June there were 58 red to 42 white corpuscles. On the 16th the anæmia was less; urine not albuminous. On the 17th there were only 18 white to 100 red corpuscles in the blood; a few leucocytes being of normal size, but the majority were smaller than natural. The relative quantity of white corpuscles varied much, falling on July 7th to 10 per cent., and on the 8th they were not in excess of the normal proportion. Their size varied, and the total number of corpuscles also diminished, the blood being more watery at times. On Aug. 10th the cervical glands were enlarged. On the 16th they were still of large size, and enlarged glands were also to be felt in the right groin and in both axillæ. The temperature was never above normal, and the proportion of white corpuscles varied. On Aug. 21st the glands were still increased in size. The phosphorus, which for nearly three months had been given with perchloride of iron, was now given in combination with strychnine, and reduced iron administered instead of the perchloride. She then left the hospital for a few days, and was readmitted on Sept. 5th. She still remains under treatment, but has taken no phosphorus since her readmission; and has passed through an attack of acute pericarditis and pneumonia, the temperature never rising above 100°. The pallor and the condition of blood remain unaltered. Dr. Goodhart remarked that the precise nature of the case was still open to doubt. From the considerable glandular enlargement, it might be regarded as an example of Hodgkin's disease with an increase in the number of white corpuscles. The variations in the condition of the blood were of interest; there being sometimes no excess, at other times a large increase, in the number of white corpuscles, which, as a rule, were extremely small in size. There was still much doubt as to the precise clinical or pathological significance of excess of white blood-corpuscles. This excess might occur in simple anæmia; in splenic leukæmia, where the cells were of normal size; and in the lymphatic form, where (as in this case) they were smaller than natural; whilst, again, other cases presented no excess of leucocytes, but only a quantity of large granules. Regarding the blood as a fluid tissue, he would ask whether these variations in its constituents were not sufficient to constitute different diseases? There were all gradations between the cases of pronounced splenic leukæmia and the one recorded.

Sir WM. JENNER read brief notes of three cases of Leucocythæmia treated by Phosphorus. The cases had occurred in private practice. The first was that of a barrister seventy-one years of age, first seen by Sir Wm. Jenner on July 31st, 1875. The spleen reached two fingers'-breadth below the umbilicus, where its notch could be felt. The temperature was 100°, and the white corpuscles were extremely numerous. On Nov. 2nd the spleen reached four fingers'-breadth below the umbilicus; the white corpuscles were as numerous as before. He had been taking, in the interval, three grains of phosphorus pill three times a day, and for one week twice a day. He had lost flesh. Temperature 100°. Death took place in December. The second case was that of a lady thirty-eight years of age, who presented all the usual symptoms of splenic leukæmia. There was a large excess of white corpuscles. She also took three grains of phosphorus pill three times daily. The temperature ranged from 97·5° to 101°. She gradually got weaker, and died on July 26th. The third case was that of a married lady, aged twenty-seven, who consulted Sir W. Jenner early in June. This was another marked case of splenic leucocythæmia. The morning temperature was natural; evening, 100°. The same treatment was pursued as in the other cases, except that in July, at Dr. Broadbent's suggestion, capsules containing phosphorus were substituted for the pills. There was then not much improvement. The temperature was 100°; night-sweats less profuse; but the epistaxis was more abundant, and the white corpuscles had not diminished in size. On Nov. 8th Sir W. Jenner again saw her. She had now been taking phosphorus ($\frac{1}{70}$ gr.) in capsules since July 15th. The spleen had continued to enlarge; epistaxis occurred at rare intervals, but she complained of extreme giddiness on movement. The white corpuscles were at least as numerous as the red. Sir W. Jenner explained that he had furnished these outlines of cases occurring in his practice as embodying his experience of the phosphorus treatment.

Immediately on the conclusion of the President's con-

tribution, and before the time usually allotted to the meeting had expired, Dr. SCOTT DONKIN rose and moved the adjournment of the discussion, because we ought not to rest content with mere facts, but investigate the general principles of the origin of such diseases. Whereupon Dr. GLOVER opposed the adjournment, as tending to lead the Society away from strictly clinical facts, which the papers that had been read had fully exhausted.—Sir WM. JENNER said that the cases read involved some very important clinical and therapeutical facts, and for that reason he was in favour of adjourning the discussion, the object of which should not be to deal vaguely with general principles, as Dr. Donkin seemed to indicate, but rather to elicit fresh facts and furnish new points for observation.—Dr. GREENHOW supported the adjournment, but not on the grounds upon which Dr. Donkin based his motion. He would like to refer to some cases which had been under his care.—Mr. BRUDENELL CARTER mentioned the case of two children, aged nine and ten years, whose father had also been the subject of splenic leukæmia. The children were under the care of the late Dr. Anstie. He mentioned this in order that members might, on referring to their cases, see if any light could be thrown on the heredity of the disease.—The motion for the adjournment of the discussion was then put and carried, Sir W. Jenner expressing a hope (which was received with marks of approbation by the meeting) that intending speakers would bring as many facts as they possibly could and as few theories as their minds would permit them.

The Society then adjourned.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

ON Wednesday, the 22nd ult., a meeting of this Association was held, Mr. Cartwright, F.R.C.S., President, in the chair. Mr. H. Hayward, M.R.C.S., Mr. Isidor Lyons, M.R.C.S., L.R.C.P., Mr. A. Morley, M.R.C.S., Mr. G. Moore, F.R.C.S. (Dublin), and Dr. W. C. Grigg, were admitted Fellows of the Association.

The PRESIDENT read a paper "On Teething and its Complications." He commenced by pointing out how great was the importance of the subject he had chosen to those practising any branch of medicine, alluding to the extensive sympathetic connexions of the nerves supplying the teeth, and their intimate relation to the system generally. He then spoke of the effect that the "habits of the age" exercise on healthy dentition, mothers being careless of their responsibilities, not only after, but before, the birth of their offspring. He next considered the difficulties of the first dentition, and the many constitutional affections synchronous with that period — cerebral, cerebro-spinal, cutaneous, and other diseases, treating them in their two relations of dependence on, and independence of, eruptive complications. After giving the results of his experience in hospital and private practice, he remarked that he did not believe in the somewhat indiscriminate crusade against lancing of modern days, and quoted many instances of its proved efficacy when resorted to on rational principles. Finally, he considered the subject of the second dentition, pointing out how nearly every organ of the body might be more or less affected sympathetically by dental lesion, concluding a paper of much interest with several illustrative cases and a *résumé* of those points which he considered to be especially worthy of discussion.—Mr. T. EDGELOW said that Mr. Cartwright had alluded to the subject of lancing, and he was pleased that he did not condemn the practice. He alluded to several sympathetic disorders connected with dentition, and proved that many of these might be relieved by the judicious use of the lancet.—Mr. GAINE (Bath) mentioned a case in which he was interested, remarked that in his experience lancing was often resorted to very indiscriminately, and said that he was much opposed to the practice when the operation was performed only on expectant principles.—Mr. NAPIER pointed out the multifarious nature of the complications which are apt to owe their origin to abnormal development of the teeth. Amongst others, he was inclined to attribute a large proportion of cases of infantile convulsions to too rapid or retarded development of the teeth. Half a century ago, infantile convulsions were ascribed almost unconditionally to teething; now, some were inclined to almost entirely ignore its influence on the brain; but the relief that is sometimes afforded by the lancet when applied at the right time and with judgment is sufficient proof that there are cases in which the child is suffering from a mere mechanical obstruction which is thus easily removed. He then reviewed some evils more immediately connected with imperfect dentition, remarking that in strumous cases they are sometimes of a formidable nature. The subject of dentition, he said, was one opening a wide field of interest to the physiologist, not the less so that our present knowledge of the nature, formation, and relative influence upon the human frame of these dense structures is imperfect. He called attention to the fact that these dense structures must have a more delicate and complete organisation than those whose constituent parts are less compact, and were therefore more liable to get out of order.—Dr. LITTLE regarded the evils of dentition as the product of unfavourable influences in operation either before or at birth, or about the teething period. He remarked that infants born with an excess of vitality, from want of breast-milk, pure air, &c., become the subjects of "difficult dentition," rickets, infantile paralysis, bowel and brain diseases; he thought that the accumulated hindrances to development occurring during the early months of life produce effects during dentition which are often attributed to it instead of disorder of more important organs, consequent upon errors of management or hereditary influence, though he quite agreed with the speaker who preceded him that difficult dentition reacted mischievously upon the hypersensitive nervous structures of the infant. He thought that the benefits following lancing of the gum were due to the relief of pain and tension, and to its counter-irritant effect, and he asked for information from the Society as to the nature of the force which propels the tooth from the jaw through the gum, he regarding it as the result of progressive addition of material to the body and the fang.—Mr. CATTLIN agreed with Dr. Little that errors in diet and constitutional weakness might and did add to the danger of the many disorders occurring synchronously with teething, but he had no doubt that convulsions and other serious nervous lesions often arise solely from irritation connected with teething, though the fact that infants in country districts suffer far less than those living in large towns proves that the weakly and scrofulous are more predisposed to danger at that period. The use of the lancet ought to depend upon a correct diagnosis, and should never be resorted to empirically. He quoted several cases proving its efficacy, and notably one of a child, who always suffered from croupal cough when a tooth was about to be erupted, which incision of the gum invariably relieved.—Mr. HAMILTON CARTWRIGHT said that instances of sympathetic lesion connected with the teeth were innumerable, and he had only recently seen a case where the extraction of a tooth had relieved supposed amaurosis, and he now had under his care a lady who invariably referred pain to certain teeth on the recurrence of each menstrual period. The occurrence of otalgia and otorrhœa during the eruptive stage of dentition was particularly interesting. Mere pain was explicable by the connexion of the fifth with the auriculo-temporal and vidian nerves; but the occurrence of suppuration was still more important, probably having its origin in long-continued irritation of Jacobson's plexus, which, supplying the tympanic structures, is in connexion with the otic and Meckel's ganglia, as also with the facial nerve and the carotid branch of the sympathetic—facts which should never be forgotten in obscure neuralgic cases. He then alluded to the frequent occurrence of skin diseases during dentition, and mentioned a case of neuralgia connected with the fifth nerve which was always preceded by a rash. Pointing incidentally to the known association of shingles with neuralgia, he suggested that, in considering the pathology of cutaneous diseases occurring at this period, the development of the teeth from dermal structures, as well as their nervous connexions, should be remembered, as probably a more than chance connexion existed between the nerves, skin, and teeth in such cases.—Dr. LITTLE, in relation to cutaneous disorders connected with dentition, said that he could not forbear mentioning a case in which a lady

was attacked by a severe impetiginous eruption whilst cutting her wisdom teeth, this covering her head, ears, and face. Her mother said that she suffered from crusta lactea when cutting her first teeth, a remarkable confirmation of the views advanced.—Dr. R. LEE was inclined to ascribe most of the constitutional derangements occurring during dentition to a primary constitutional cause—as, for instance, the various forms of cutaneous eruption, diarrhœa, and such like, though he had no doubt that some of the remarkable disturbances in the nervous system of the young child were to be ascribed to the local irritation of teething. Still, even then, it must be allowed that a constitutional condition might favour such irritation; indeed, he thought that the cerebral excitement incident to that period seemed to belong to the same class of temporary nervous disturbance as that produced by worms, the development of which is also primarily favoured by constitutional conditions. Nevertheless, the symptoms must, in a practical point of view, be ascribed to them, the same view seeming to him to hold good with regard to the teeth.—Mr. RISDON said that, having been formerly a practitioner of medicine, and now a specialist connected with a Children's Hospital, he thought that the importance of the eruptive period in the child could not be overrated, and that although he would not say that all ills connected with that epoch were owing to dentition, he thought very many were.—Dr. WEST said that he was much pleased at finding himself amongst a body of gentlemen practising a specialty who, holding the degrees of physicians and surgeons, were determined to keep up their connexion with, if he might so express it, the parent stem. He felt certain that no branch of special surgery could thrive unless it maintained the closest bonds with the general science of medicine and surgery, and that whatever opposition those constituting the Society might encounter, they were adopting the right and only means of obtaining a proper status for their branch of the profession. He then alluded to the subject discussed that evening, and said that it alone would show how closely dental surgery, practised by those qualified to practise it rationally, was allied to general medicine, and how necessary it was that the practitioner should distinguish between those diseases which were dependent upon, and those which were distinct from, dental irritation. He mentioned the great predominance of the spinal over the cerebral system in early infancy, and showed how any eccentric source of irritation was thus liable to be the origin of serious mischief. He himself believed that to dentition directly might be ascribed many diseases, especially those connected with the nervous centres. Lancing had been mentioned as a method of treatment, and he thought that no one who had seen its results could doubt its great efficacy. He concluded by calling attention to the many interesting questions that Mr. Cartwright's suggestive paper had called forth.—The PRESIDENT then briefly replied.

The hour being late, Mr. Edgelow's paper was obliged to be postponed to another meeting.

Reviews and Notices of Books.

A Directory for the Dissection of the Human Body. By JOHN CLELAND, M.D., F.R.S., Professor of Anatomy and Physiology in Queen's College, Galway. London: Smith, Elder, and Co. 1876.

THIS small book has been written with a view to supplement existing works on anatomical demonstrations and systemic anatomy, rather than to interfere with them. It is intended for the guidance of students in the dissecting-room, and therefore the structures are only named, and the necessary steps for their display and for studying their relative positions pointed out; all details of their description are omitted, and these must be acquired by the student from his text-books at home. The idea is certainly a very good one, and the general plan and arrangement of the volume are greatly to be commended. It will relieve the industrious student from the necessity of taking a large book into the dissecting-room, and at the same time lead him to a careful investigation of every structure as it is met with *seriatim* in his dissections. He will thus be induced to seek out every vessel and nerve for himself, and a methodical use of such a handy little volume as this is will teach him more practical anatomy in a few months than he can acquire in a much longer time if this be spent over carefully selected preparations, as we fear is too much in vogue at many schools at the present time. Indeed a thorough knowledge of human anatomy, with a cultivation of manipulative skill and powers of observation, can only be obtained by some such method as that recommended by Professor Cleland. Whilst according to the author a large amount of praise for the general scope and plan of the work, we must indicate one or two points in which it should be improved in the next edition. Every school has its own method of dissecting different regions, and we do not so much find fault with the author's mode of displaying the structures as with his occasional want of clearness and precision. Thus the student would be led to imagine from p. 89 that the phrenic nerve is a branch of the brachial plexus; and in the dissection of the pterygoid region, there is no mention made that in a large number of cases the internal maxillary artery lies deeper than the external pterygoid muscle. Again, in the directions for the dissection of the sublingual region, the necessary detachment of the mylo-hyoid muscle from its fellow is omitted, and the necessity of avoiding the attachments of the genio-hyoid and genio-hyo-glossus to the lower jaw, when this bone is divided near the symphysis, might have been especially insisted on. Structures that should be noticed are sometimes omitted in the descriptions—as, for instance, the eminentia collateralis on p. 79, the great and external petrosal nerves on p. 101, the deep muscular branches of the cervical plexus in the dissection of the neck, and the last dorsal nerve on p. 163. A careful examination also shows some errors of detail: thus, on p. 42, "semi-membranosus" should be *semi-tendinosus*; on p. 89, "subscapular" should be *suprascapular*; and on p. 100, "middle" constrictor is an obvious misprint for *superior*. We doubt also if most anatomical observers would allow that the nerve-supply to the inner rectus muscle was from the *upper* division of the third nerve, or would agree with the author's distribution of the external saphenous nerve. According to our experience, this nerve either supplies the outer side of the little toe only, or it invades the domain of the musculo-cutaneous by supplying also the adjacent sides of the fourth and fifth toes. Orthographical errors, as "venisection" (p. 27), "concatinate" (p. 85), and such awkward sentences as "and it is questionable *that* it does not afford, &c." (p. 70), should have been corrected whilst the book was being revised. We think, too, that the wants of senior students would have been more fully supplied if the author had added a chapter on the method of dissection that is necessary for a proper study of the cerebral convolutions, and of the course and direction of the fibres of the brain.

We refer to these defects because the work is so very useful and in many respects so good. In English dissecting-rooms it will certainly be contrasted with the directions in Ellis's Demonstrations of Anatomy, and such alterations as we have pointed out must be made before the smaller book will inspire the careful dissector with such confidence in its accuracy as to enable him to relegate the larger volume to his bookshelf for more convenient study at home only, as is suggested by Professor Cleland.

Kirkes' Handbook of Physiology. Edited by W. MORRANT BAKER, F.R.C.S., Lecturer on Physiology at, and Assist.-Surgeon to, St. Bartholomew's Hospital. Ninth Edition. London: John Murray. 1876.

THE labours of an editor of a popular modern text-book equal those of Sisyphus. No sooner has his work issued

from the printers' hands than he has to set to work to collect materials and revise facts for a fresh edition that is sure to be called for at no distant date. Mr. Morrant Baker tells us that the "average length of life of new physiological facts may be reckoned at about three years." An edition, therefore, that was unexhausted at the expiration of that period would be of little value to the student. How closely the necessity of keeping pace with the advances of physiological science has been recognised by the editor of "Kirkes' Physiology" is attested by the fact that no less than five editions of the work have been called for since 1860, each edition showing a distinct and marked advance on its predecessor. The popularity of the Handbook with teachers and students has been attained, not simply by the clearness and excellence of the method of arrangement, but by its singleness of purpose—that of being "a students' guide to those parts of the science of physiology which are either incontrovertible or at least fairly established." The work, therefore, is never obscured by references to unsupported statements or inferences drawn from isolated facts. Mr. Baker's task in selecting materials which seemed "from various analogies most likely to have a long term of existence, or to take their place ultimately among established truth," must have been difficult indeed; and the more perplexing must the work have been when we reflect on the vast amount of material he must have submitted to review. Undoubtedly science is considerably indebted to Germany for much of the recent progress in physiological research, but we cannot help feeling at times that she has retarded as well as aided our progress. It must not be forgotten that in Germany many of the contributions to the numberless scientific periodicals are made by men who are scarcely more than senior students, and whose work ought therefore to be thoroughly tested before it is unhesitatingly accepted. In Germany the value of these premature productions is so well estimated that they are regarded more in the light of college exercises than serious scientific contributions. The fact, however, of their admission into the journals at all adds considerably to our labour here, as much valuable time has to be expended in sifting the good work from the bad, and weeding out dubious statements and hasty generalisations. Mr. Baker has exercised a wise judgment in quoting only from authors of recognised scientific standing. Pains have been taken to give full information and instruction on all the facts and generally admitted principles of physiology. Considerable additions have been made to the letterpress and to the number of illustrations, particularly as regards the histological portions of the work. A valuable summary has been contributed by Dr. John Williams for that part of the section on Generation which relates to the "structure of the mucous membrane of the uterus and its periodical changes." This subject has hitherto received but little attention from physiologists, and till recently the structural changes that precede and follow menstruation have been wrapt in obscurity. For the first time these changes are fully described and presented to the student. The only point that detracts from the full merit of the book is the brief manner in which zoo-chemistry is treated. A few additional pages devoted to the distinctive chemical reactions of the tissues, fluids, and principal constituents of the body would have added but slightly to the bulk of the book, whilst the addition would have proved of immense service to the student, who will have to supplement this deficiency by reference to other works. In conclusion, we have no hesitation in recommending this edition of Kirkes as the best text-book of physiology available for the ordinary student at the present moment.

Compendium of Histology. Twenty-four Lectures by HEINRICH FREY, translated from the German by GEORGE R. CUTTER, M.D., Assistant-Surgeon New York Eye and Ear Infirmary. With 208 Woodcuts. London: Smith, Elder, and Co. 1876.

STUDENTS can no longer complain of a lack of treatises on histology, no less than four having appeared within the last few weeks—Professor Rutherford's "Outlines of Histology," Professor Foster and Dr. Langley's "Elementary Practical Physiology," which contains a large amount of histology, Dr. Harley and Brown's "Histological Demonstrations," and now Frey's "Compendium." This work is simply written, nicely got up, well printed on good paper, and with an abundance of excellent woodcuts, many of which are original, though they have been copied till they are sufficiently familiar to English readers. It is curious that the very first passage is out of date. The author gives an elaborate account of the bathybius, describing it as a nitrogenous carbon compound, distended (!) in water, and of an extremely complicated chemical structure. We thought all this was a thing of the past. The description of the several tissues is both accurate and full, without being overladen with the opinions of microscopists, whose opinions, after all, are of comparatively little weight. In muscle the author notes the observations of Kölliker, Krause, Hensen, and Cohnheim, as well as those of Bowman and Dr. Martyn. Schäfer's results are not mentioned, though the translator might have alluded to them in a note. The translation is evidently by the hand of one who has not had much experience in translation, and some of the expressions strike one as very curious. We are told, for example, that the "massiveness," meaning the quantity, "of the adipose tissue varies considerably." The word "our" is introduced in a most ungraceful manner, and sometimes gives a wrong impression. For example, it is said: "Certain of the mammalia (the carnivora and ruminantia) have a bright glistening place in the interior of the eye called the tapetum. Our retinal epithelium is here unpigmented. In albinos this is the case throughout," ..... which reads as if the human retinal epithelium was here destitute of pigment. Again, no practised translator would consider a sentence as this passable: "The simplest unstratified pavement epithelium belongs in most, but perhaps not all its occurrences, to the endothelium." The meaning is intelligible, but the rough copy should have been revised. Even with these faults of translation, however, the work will be found a useful one.

Operative Surgery and Surgical Anatomy. By Professor CLAUDE BERNARD and CHARLES HUETTE (de Montargis). Translated from the French and edited by ARTHUR TREHERNE NORTON, F.R.C.S., Assistant-Surgeon, Surgeon in charge of the Throat Department, Lecturer on Surgery, and late Lecturer on Anatomy at St. Mary's Hospital, London. London: Baillière, Tindall, and Cox. 1876.

THIS book contains eighty-eight steel engravings illustrative of surgical anatomy and the chief surgical operations, the letterpress being merely descriptive of the steps of these operations and of the regions. No comments are made as to the utility or difficulty of the various procedures, and the book is, therefore, of more use as a guide to operations on the dead body than in ordinary every-day practical surgery. The illustrations (of which we have before us Plates 1 to 11) are beautifully executed, but we think that their small size detracts greatly from their value. The text is very clear, and the directions are very accurate and precise. If the plates were considerably enlarged the work would be entitled to every commendation.

OUR LIBRARY TABLE.

The Journal of Anatomy and Physiology. Conducted by Profs. HUMPHRY, TURNER, FOSTER, and RUTHERFORD. Vol. XI., Part 1.—The present number of this journal, which is now published quarterly instead of half-yearly, contains thirteen original articles, besides a Report on Physiology, by Dr. Stirling, and well sustains its high reputation. The first article is by Charles Creighton, on the Development of the Mamma and of the Mammary Function. In this he refers to opposing views of Darwin and Mivart in regard to its evolution, the former contending, in common with most embryologists, that it is an hypertrophied cutaneous gland; the latter that it is inconceivable that its evolution can ever have commenced by the young of an animal being saved from destruction owing to its accidentally sucking a drop of scarcely nutritious fluid from such a gland. From a review of its development in various orders of mammals, Dr. Creighton considers that its homologies are much wider, and that, in fact, the homologue of the mamma is a fat body. Prof. Turner gives some general observations on the placenta, with especial reference to the theory of evolution. Mr. T. J. Parker describes the stomach of the fresh-water crayfish, mentioning some particulars that have been hitherto overlooked. Prof. Rutherford and Mr. Vignall continue the account of the action of various agents on the Biliary Secretion of the Dog. Dr. P. H. Carpenter offers some remarks on the Anatomy of the Arms of the Crinoids. Mr. J. C. Ewart contributes some observations on the Structure of the Retina; Dr. Flint a paper on the Physiological Effects of Muscular Exercise; and Mr. Bullar one on the Generative Organs of Parasitic Isopoda. The *pièce de résistance*, however, is Mr. Balfour's continuation of his researches on the Development of the Elasmobranch Fishes. Lastly, Mr. Langley has a short paper on the action of Pilocarpin on the Submaxillary Gland; and Mr. Dreschfeld proposes a new staining fluid in Eosin.

A Systematic Handbook of Volumetric Analysis. By FRANCIS SUTTON, F.C.S., Public Analyst for the County of Norfolk, &c. Third Edition. Churchill. 1876.—Mr. Sutton's now well-known handbook has doubled in size and value since its first appearance. It supplied so great a want, and was written with such care and lucidity, that it was at once adopted by chemists, and is not likely to be readily supplanted. Each new edition has been revised carefully, and copious additions made, many by the original author, but several very important ones by Professors Thorp and McLeod. To these gentlemen we owe the valuable chapters on water analysis and on the analysis of gases, each of which is a complete monograph. Very few important omissions can now be detected in the work, and most of the processes described have been personally verified in the laboratory. Of the omissions one of the most remarkable is Schützenberger's beautiful method for the volumetric estimation of dissolved oxygen. This, we trust, will be included in the next edition.

Medicinal Plants. By ROBERT BENTLEY, F.L.S., and HENRY TRIMEN, M.B., F.C.S. Parts X. to XIV. London: J. and A. Churchill.—This useful publication continues to maintain its excellent character, and bids fair to take a high position as a kind of companion atlas to the pharmacopœias of the world. Here and there, it may be, some fault might be found in the too great height of colouring; but, as a whole, there is a degree of faithfulness about the representations which does credit to the artist. Some very rare plants have been already figured; some of them drawn from dried specimens, and the details (we presume) worked out from the botanist's description. Many even of the most insignificant plants, of which the medical use has become almost extinct, find a place here; testifying that the authors are bent upon making their work complete in every sense. The part just issued (November) contains no fewer than eight plates—viz., Delphinium staphisagria, Potentilla tormentilla, Ecbalium elaterium, Carum carni, Convolvulus scammonia, Lavandula vera, Nepeta cataria, and Marrubium vulgare. Of these, only four are at present retained in the British Pharmacopœia; but the others, including the humble horehound and tormentil—remedies still largely used by the village herbalist,—find yet a place in the United States Pharmacopœia.

Chemia Coartata, or the Key to Modern Chemistry. By A. H. KOLLMYER, A.M., M.D., Professor of Materia Medica and Therapeutics at the University of Bishop's College, &c. London: Churchill. 1876.—This little work comes to us from Montreal. It consists mainly of tables, in which the elements and their chief compounds, their sources, preparation, properties and tests, are arranged in separate columns. All the elements, even the scarcest, are included, and the tables are connected by letterpress, in which a sketch of chemical theory is given. The book may prove of some service to students who are "cramming," but the information conveyed is extremely meagre, and often inaccurate, and is not calculated to be of much real use in study. The author tells us in his preface that his object has been "to compress into as small a space as possible everything connected with the study that deserves attention." His ideas of what deserves attention in chemistry seem to be rather limited.

REPORT
OF
The Lancet Special Commission
ON
PUBLIC HYGIENE IN PARIS.

THE oft-quoted opinion that Paris is the capital of European civilisation is, it is well known, held not only by all Frenchmen, but by very many aliens. This is not surprising. The beautiful city of the Seine has been the birthplace of so much that is great in art, literature, and science, and can boast of so many wise internal regulations, and, upon the whole, of so good a municipal government, that she is of necessity an object of interesting study to the whole civilised world, and may well be loved by her children. Foreigners cannot fail to gain when they bring the light of criticism to bear upon her, striving to imitate her strong, and to avoid as far as may be her weak, points.

It is in this spirit that we have undertaken the present somewhat laborious inquiry. England has much to learn from Paris; Paris much from England. We shall endeavour to do strict justice to both; and though our sketches must, from the limits of our space, be fragmentary, we trust they will in all cases be impartial and unexaggerated.

The English have, indeed, far more than a merely scientific interest in the sanitary condition of Paris. In 1874 no less than 220,614 persons left our shores for the Continent. It is evident that the great majority of those persons must have visited Paris either in going or returning, and that a very large number must have stayed for some time in it. Scarcely more than five per cent. of the whole number crossed to Ostend, and even of these many no doubt found their way sooner or later to Paris. If we add to these numbers the thousands of English who reside permanently in Paris, it will be seen that a knowledge of the sanitary condition of the city is really more important to our countrymen than that of many large English towns.

The subject which we discuss on the present occasion is, it happens, one in which our country possesses a most decided advantage. Disinfection as a system is almost unknown in Paris, and so, of course, in France. Some allusion has already been made in these pages to this fact in our recent report on the sanitary condition of Boulogne-sur-Mer*. There, as in Paris, there is no law to provide for disinfection of houses or clothing, even after the most infectious of zymotic diseases; nothing, in fact, to prevent houses or clothing saturated with the poison of scarlet fever or small-pox from being transferred direct to healthy subjects. Indeed, even if the patient himself or some friend should desire to disinfect the establishment there would be considerable trouble in doing so. It is so little the custom to fumigate rooms, that there would probably be some difficulty in finding men able to accomplish the task; while, on the other hand, there is, we are informed, no establishment, even in Paris, where bedding, clothes, carpets, &c., can be disinfected by exposure to heat. Nor is this all; there are no means of protecting the public from infection in public conveyances. A person suffering from fever, even in the stage of desquamation, is not forbidden by law to enter an omnibus, cab, railway carriage, or other public vehicle. On the contrary, Dr. Méhu, of the staff of the Necker Hospital, assured us that patients often rode up to the doors of the hospital in the omnibus that passes along the Rue de Sèvres, and this, too, when they were suffering from some form of infectious fever! Such instances of gross imprudence will startle every English reader, and they are rendered more striking by the fact that the disinfection of cattle trucks in all doubtful cases is rigidly enforced. Cattle are, therefore, better cared for in this respect than human beings.

Further conversation with Dr. Méhu, to whose courtesy we are indebted for much valuable information, served to convince us that the Paris hospitals are not unlikely to help in the spread of an epidemic. Without entering at present on the general question of hospital administration, it may be remarked that in at least one hospital various reasons, and notably the want of funds, prevent the proper separation of different forms of disease. At the Hôpital Necker, the fever wards are under the same roof as the wards containing patients suffering from other complaints; and when the former are overcrowded, some of the fever cases are brought in to the general wards; and during the war it often happened that a patient who had migrated from the fever-ward was laid side by side with other inmates who had recently undergone surgical operations! No wonder that the French poor object to being taken to the hospital, and we are not surprised to learn that there is a formidable agitation at the present moment, supported by Dr. Passant, general secretary of the Assistance Publique, and other eminent practitioners, in favour of performing even the most complicated surgical operations in the homes of the poor, so as to save them from the dangers of the hospital. Dr. Méhu was much surprised, we might almost say amused, when we attempted to convey to him some idea of the provisions of the English Public Health Act; and Dr. Passant, whose kind assistance we have also to acknowledge, declared that it would be impossible to enforce such a law in France without running the risk of creating a revolution. His long experience of the poor had taught him that they possessed no sanitary knowledge whatsoever, and could not understand, and therefore would not tolerate, any effort to disinfect their homes. In proof of this assertion, he took us to the dwelling of an unfortunate man who had just lost his child from diphtheria. He lived in a little shop, situated in an unwholesome street which had been visited with several cases of the same malady. The shop was full of all manner of rubbish, such as the flock for bedding, a few pieces of old furniture, an abundance of rags, some second-hand mattresses, stuffing for chairs, old pots and pans, &c. Behind this accumulation of dirty and worn-out furniture, the family slept; some on the floor of the shop, and the father and mother and one of the children on a rough gallery or shelf erected for this purpose, and situated at a distance of about three feet from the ceiling. The shop was so crowded that we could not measure its dimensions accurately, but it appeared to be about fifteen feet long and ten or twelve feet wide. There was no possibility of ventilating the back part, where the child had died and the family slept; and yet the mother, on our looking rather inquisitively into this den, innocently remarked that "it was all very clean and wholesome." The people had evidently no idea whatever of infection, and Dr. Passant defied any English sanitary inspector to deal satisfactorily with such a case. When we suggested that a great part of the rubbish accumulated around might be burnt and the rest purified, and the shop washed out and fumigated, Dr. Passant energetically protested that the owner would consider his rights of property so grievously assailed that he would raise the neighbourhood, and perhaps man a barricade, at the earliest opportunity. In the meanwhile, second-hand bedding and furniture, fresh from a fatal case of diphtheria in an unventilated and dirty shop, are actually being offered for sale in one of the back streets of the aristocratic and wealthy Quartier St. Germain.

The difficulties of disinfection in Paris do not, however, seem to us so great as it is generally thought; and it is not without a long experience of the French poor that we venture upon this assertion. Even the most ignorant Frenchman has by nature a logical mind; he is almost always amenable to argument; his curiosity is easily awakened, and he readily grasps whatever information he can obtain without the trouble of study. It is as easy to educate the French poor by verbal demonstration as it would be difficult to persuade them to study books. They are not so prejudiced in favour of old customs as are our poor, and a new idea is more readily embraced than in England. If, therefore, French practitioners would seize all the opportunities they possess of inculcating the elementary principles of hygiene, and of pointing out the causes and media of infection, we are convinced that, after a few years of such propaganda, it would be easy to apply among the French poor sanitary regulations quite as stringent as any which are enforced in England. Apart from the characteristics of the French people to which we have just alluded, the experience of the past confirms this opinion. Though little or nothing has been done in this particular direction, there has been a good deal of sanitary legislation in other respects. The immense benefits accruing from these enactments have, of course, not been acquired without very serious interference with the so-called liberty of the subject. It seems absurd, for instance, that a nation which tolerates the most active and constant police interference in the enforcement in every part of the country of what corresponds to our Contagious Diseases Act should object to the disinfection of dwellings impregnated with the germs of zymotic poison.

We therefore conclude that not only is improvement in these respects possible, but that it will in all probability be accomplished before long. There are, we were assured, some sixty members of the Assembly who may be ranked among the sanitary reformers of France. Indeed, as popularity has, under the *régime* of universal suffrage, more influence in deciding the fate of an election than a long purse, it is not surprising that so many medical men should have been elevated to the dignity of legislators, nor is it unreasonable to rely on their influence to forward the cause of sanitary reform. Of course the outbreak of war in the East, or some other unexpected political crisis, may postpone the realisation of these prospects; but unless the ordinary course of events be interrupted by some such accident, we may look forward to interesting debates in the French Assembly on questions relating to hygiene. The great struggles over fundamental constitutional principles are now concluded, or at least postponed to the end of the Septennate, and there could scarcely be a better opportunity than the present for sanitary legislation.

We regret that this first report should have involved so much disagreeable criticism. Future reports will present many points in which the well-known French administrative skill is more favourably displayed. But we cannot refrain from pointing the moral of the present one, and begging from the French municipal authorities, as well as from those of our own countrymen who are interested in France, a careful consideration of the facts we have disclosed.

* THE LANCET, Sept. 30, 1876.

THE LANCET.

LONDON: SATURDAY, DECEMBER 2, 1876.

BEFORE the present number of THE LANCET is in the hands of most of its readers the College of Surgeons of England is likely to have taken a step of great moment with respect to its own interests, and the welfare of the profession. The Council will again have had under its consideration the question of a Conjoint Scheme, as agreed to by a large proportion of the co-operating bodies, and modified by the Senate of the University of London. It may either have rejected the scheme or accepted it. We sincerely trust that it will have disposed of it definitely one way or another, so as to leave the College and all other co-operating bodies at liberty to attend to their own proper work. It is lamentable to think that the time of the Presidents and Councils of the Royal Colleges for seven or eight years back has been very largely spent in exhausting and fruitless attempts to concoct a scheme. Think, for example, of the time of such a man as Sir JAMES PAGET, and his influence in the College, being occupied, almost exclusively, in regard to such an elementary and palpable question as this, and it will be easy to understand how it hinders the general and special usefulness of the medical corporations. Schemes have been concocted to the number of six or eight. In fact, they constitute quite a literature, though by no means an edifying or elevating one. In one scheme the Apothecaries' Society is left out; in another it is included. In one the Universities are included; in another they are omitted. In one the College of Surgeons is to have the appointment of Examiners in Surgery out of its own Court of Examiners; in another they are to be appointed partly by various co-operating bodies. In one scheme the Committee of Reference is composed so that the corporations have a majority; in another so that the universities have a larger number of representatives. In one the money accruing from the examination of students is divided in one way; in another scheme in another. This is the kind of work which for six or eight years has been harassing the responsible members of the Councils of the medical bodies, and especially of the two Royal Colleges; and nothing but the sickening nature of it, and the discreditable look of vacillation which the action of one of the Colleges is beginning to wear, is likely to interfere with the endless continuance of this insuppressible question.

We use the word "insuppressible" advisedly. The question cannot be suppressed; it must be settled. The shape which it takes now before the College is, Shall it settle the question now, and take the scheme to which a large number of the co-operating bodies have agreed, with the modifications suggested by the University of London? The objections raised against the proposal of the University of London by a certain section of the Council are not without some force. As we have said before, it is an unreasonable thing to give the University of Durham as much representation in the Committee of Reference as the College of Surgeons. Even the other universities (except that of London) have done very little for medicine to justify them in claiming equal representation with the College of Surgeons. Some superiority in representation should be given to the corporations; at any rate, they should not be in a minority in the Committee of Reference, which will assuredly be the influential medical body in the future if this scheme is to be put into action. This much modification of the proposals of the University of London should be cheerfully conceded by it and the sister universities if they are sincerely desirous of seeing a Conjoint Scheme in operation, and will be conceded if they are not possessed by too overweening a sense of their own claims in the matter. But let us suppose that the University of London makes the acceptance of its proposals a *sine qua non*; what is the duty of the College under these circumstances? Even then we should advise the Council to agree. It is not likely that Sir JAMES PAGET will commit the College to any scheme which he does not believe to be the best procurable. Though some of them are weak enough, it is not likely that the Universities will be animated by any spirit of hostility to the corporations. It is to be remembered that they have no pecuniary interest in this or in any scheme. This being the case, their representation in the Committee of Reference will increase public confidence in it and in its work. It is sometimes said, "What have the Universities to do with this matter at all? Let them mind their own business." It is only necessary to reply, that they are making a considerable sacrifice in regard to it, very much felt and objected to by some graduates of the University of London. The Universities agree to make the passing of the Conjoint Board a condition of being admitted to their examinations. They undertake to refuse their degrees to those who have not passed. This is a great sacrifice, especially on the part of the University of London, greater perhaps than the Universities are justified in making for a partial scheme like this, which leaves the Scotch and Irish competition unequalised. For all these reasons the Corporations, and especially the College of Surgeons, should, in a liberal and magnanimous way, agree with the Universities, and throw its whole energy into an attempt to work a Conjoint Scheme. The time for haggling about details is gone. The experiment itself is only temporary, and the Scheme can be abandoned by any of the bodies after the lapse of five years, if it prove unsatisfactory. The scandal of so many competing bodies, and the injustice of continuing the absurd system of half-diplomas and a double examination of students, cannot last much longer. If the College of Surgeons rejects a scheme so commended to it as this is, it is likely to lead the way to a system of examination far more satisfactory in many ways, but far less satisfactory to the College.

VARIOUS computations, ranging from one in two, up to nine in ten cases, have been made to estimate the proportion of cures which may be effected if the treatment of insanity is commenced sufficiently early, and so conducted as to produce no exacerbation of the disease. In point of fact, however, startling as the assertion may appear, mental derangement, when not complicated—or, to be accurate, when not con-

nected in the relation of effect and cause—with organic disease is one of the most rhythmical and manageable of morbid affections, and, under proper and prompt treatment, should yield a large percentage of cures.

The disastrous and enervating impressions that mind disorder is not amenable to the influence of ordinary remedies, that the subjects of this malady must needs be placed under a special *régime*, and that, if patched up for the moment, the shattered intellect will almost certainly break down again when its strength comes to be tested, and must finally be laid in ruins, are the fruit of a policy as shortsighted as it is unscientific, and not less injurious to the class of sufferers it is meant to serve than to the profession, by which an unsound and mischievous proposition has been adopted without having been proved. There is not a vestige of truth in the presumption, so commonly assumed as a postulate, that the mind is something apart from the body, capable of becoming the seat of a peculiar class of diseases called mental, for which a special system of medicine is necessary—to wit, the "psychological." The fundamental proposition is not grounded on facts, and the superstructure raised upon it can have no stability. There is no form of insanity, not excepting that which, for want of a better term, has been designated "moral," that does not stand in the closest relation to functional or organic disease of the physical organism. The researches of Dr. BROWN-SÉQUARD, which, years ago, suddenly threw so much light on the subject of nervous disease, are not improbably destined to scatter the system of medical psychology to the winds. There is no reason to suppose that explorer in physiology has formed any conception of the extent to which his doctrine of reflex morbification affects this question of mental derangement. It is possible he has not even contemplated the subject in this aspect. It is nevertheless patent to the student of mind disease that the phenomena so commonly regarded as purely mental are, in truth, the reflex consequences of physical disorganisation or disturbance located at a point the most remote from, and, perhaps, reacting upon a centre only distantly connected with, the organ of mind.

There is nothing in principle absolutely *new* in this theory of causation, but it has not until quite recently been recognised that the nerve-centres are capable of acting as mere conductors and reflectors of force, as well as force generators, and that the two forms of action, force-producing and force-conducting,—with the complementary processes of force-multiplying and force-reflecting,—may be so combined as to produce in effect the phenomena of disturbance or paralysis of one centre, when an opposite, or only remotely related and indirectly connected, centre is the real seat of the irritation or disease. That being now understood, it will the more readily be perceived how a particular form of mental delusion may, in point of fact, spring from some source as obscure as the presence of a parasite in the intestinal canal, or irritation in a distant part of the body; and how not merely so crude a form of disease as epilepsy, but dipsomania, kleptomania, and the like, may have for their real exciting cause a taint of hereditary syphilitic disease localised somewhere in the periphery of the organism, or a purely physical excitation set up in a particular region by an irritant mechanically applied. It is unnecessary and, we repeat, unscientific, to invent an empirical hypothesis of purely psychological disease when the known facts of physical disorder are sufficient to account for all the phenomena of mental derangement. The recourse is as unreasonable as it would be to create a separate system of pain diseases because it happens that the sensation of pain is frequently referred to a locality which cannot possibly be the seat of the cause. "Psychological medicine" is a mysterious figment invented as a short cut out of a difficulty with which medical science in the concrete was supposed inadequate to deal.

This brings us to the point upon which it is our immediate purpose to offer a few suggestive, rather than didactic, or even expository, remarks. Let the physician take this doctrine of reflex morbification as the key to mental derangement, and he will encounter no serious difficulty in unlocking most of the mysteries of mind disorder now relegated to the province of medico-psychology. He will not need to cast about for some strange remedy for the cure of insanity, and he will neither lessen nor destroy his patient's prospect of recovery by hurrying him off to a mad-house the moment some occult bodily disease gives rise to mind symptoms, enigmatical or obscure. We are not forgetful of the imperative need that every form of mental derangement should be placed under active remedial treatment the instant it is discerned. We started with that proposition, and it is one upon which it is indispensable to insist. Nor do we fail to recognise the almost universal necessity of commencing treatment with a complete change of scene and surroundings. Nothing of this affects the consideration that the various forms of insanity are so many groups of mind, temper, and sense *symptoms*, indicative of, and dependent upon, some physical disease. Mental remedies must be employed, and the administration needs to be conducted on the principles of psychological physiology, but that circumstance does not create or excuse a pretence of psychological medicine, just as the use of electricity or galvanism as a remedy is no sufficient ground for the erection of these peculiar modes of treatment into specialties. It is impossible to denounce in too earnest terms the erection of *specialties of treatment* or remedy.

Disease with mind symptoms is clearly within the province of the general physician to treat, and we have no hesitation in expressing a strong opinion that the neglect to recognise this fact is one reason why, with all our improved methods and more humane asylum system, the treatment of insanity is no more successful than it was fifty years ago. To come straight to the point, unless ordinary physicians can cure mental derangement, it can never be successfully treated. Suppose unconsciousness in all its forms were partitioned off to form a specialty, and instead of at once applying the proper remedies for an attack of apoplexy, the ordinary physician recommended the friends of a patient to call in two disinterested practitioners, and, after procuring certain legal documents, remove the unconscious victim to a special hospital. What proportion of cases would be discharged recovered? Those who have had any considerable experience among the insane will not need to be reminded that the brain—the organ of the mind—when disordered either by local or remote, centric or peripheral, disturbances or disease, is in a condition not less susceptible of injury than when irritated by the extravasation of a few drops of blood. Its con-

dition is probably one of greater peril from excitement, when the proper function of the organ is perverted, as in mental derangement, than when the local mischief is purely physical. The brain is singularly tolerant of material injury or disease, but disorderly action in so delicate an organ is itself a cause of morbid change. If a limb dislocated or fractured is persistently used, we know what happens. Precisely the same evil results ensue from using the mind when its component faculties are out of working order; and the wear and tear of brain not only continues, but goes on more rapidly than before, when the mind becomes deranged. The instant use of appropriate remedies is necessary, and the knowledge required to diagnose a disease with mind symptoms, and to place it at once under treatment, should be possessed by every medical practitioner. This, we take leave to insist, will never be the case, and, consequently, this class of maladies cannot receive prompt and adequate treatment in the most curable stage, until the partition-wall between this specialty of "psychological medicine" and the general science of physic is destroyed.

Scarcely a week passes without some lamentable proof being afforded that incipient mind disorder, showing itself by what are too commonly called "harmless delusions," is unrecognised and therefore uncured. A delusion of any kind, however innocent—even a sudden change of opinion on ordinary subjects, or an altered mood,—may betoken serious disease, which it would be possible to cure at the outset, but, being neglected, it is afterwards hopeless to treat. When a man exhibits what are popularly known as tokens of "queerness," instead of arguing, persuading, threatening, consoling, and the like, let the physician set to work to find a *physical* cause, and success will, in nine cases out of ten, attend his effort. The crucial mistake made at this point consists in classing the malady as *mental*, and either losing precious time—during which an accident is always possible—or, perhaps, impairing the disorder by sending the patient to an asylum. We must leave the subject at this point. The initial error can only be corrected by a bolder and more scientific view of the nature and causation of mind disorder. If this can be obtained, a better and more successful method of treatment will follow, the untoward occurrences which now so commonly alarm society and discredit the practice of medicine will be less frequent, and acute attacks of mania not so commonly confirmed. The philosophy of cure may be comprehended in a single sentence. Mental disturbance is always a symptom, and the disease or disturbance by which it is occasioned is always physical. The treatment must in the first recourse be physical too. The psychological therapy of mental derangement is expectant, and follows and waits on the physical, which any qualified and acute practitioner should be competent to apply. Such treatment cannot always be carried out amid the surroundings of home, but probably the last place in the world where an alienist physician would like to treat a friend for a mental affection would be an institution set apart for the care and cure of the insane. If there were no other reason why a better method of treatment should be devised, outside the asylum system, there is the fact that many lives are now annually sacrificed to the reluctance or omission of friends to place patients in confinement; and it is a peculiarly regrettable circumstance, that while this hesitancy is not unnaturally excused, if not countenanced, by general physicians, they are not commonly prepared to commence and carry the proper treatment of a case of lunacy straight through.

THE events of the last Arctic expedition have very naturally directed attention to the influence of alcohol in preventing, arresting, promoting, or intensifying, attacks of scurvy. Much controversy has taken place as to whether alcohol possesses antiscorbutic properties or not. But it is proper in the first place—if the question is to be fully and fairly discussed—to consider the physiology of the subject; and, looking at it from this point of view, we must admit that no form of alcohol can be regarded as an antiscorbutic, though it must be allowed that sound cider, or spruce, or bitter beer may prove serviceable to invalids suffering from scurvy, whose only drink previously has been either bad spirits or bad water, or a combination of both. The writers who saw most of scurvy during the last and the commencement of the present century are all but unanimous in condemning the use of raw spirits, whilst many of them praise the effects of a mere infusion of malt or wort, which was, we believe, largely and successfully employed by Captain COOK. If we compare the symptoms of scurvy with those of certain forms of chronic alcoholic intoxication, it is impossible not to be struck with a certain similarity between them, and that the characters of scurvy are just those that would lead a cautious practitioner to employ alcohol very sparingly until the clearest evidence had been obtained of its utility. In the scurvy-stricken and in those suffering from the toxic effects of alcohol there is the same weakness of the bloodvessels, so that petechiæ and vibices appear on slight injury, or even spontaneously; in both the action of the heart is feeble and frequent, œdema readily supervenes, and ulcers are common and heal with difficulty. There is inability to perform much exertion, either physical or mental; and, in fact, in both affections every symptom is exhibited that indicates primary disorder of the blood, and exhaustion of the neuro-muscular apparatus—just the states, indeed, in which it would seem doubtfully expedient to whip up flagging energies by alcohol at the cost of subsequent depression, unless relief were near at hand. It has been noted, moreover, that those who have been addicted to the free use of ardent spirits are especially liable to scurvy. Sir JOHN PRINGLE was not far wrong when he said that scurvy "was the result of a gradually accumulating putrefaction of the blood." If this be so, alcohol would be one of the last materials that should be used by those who are exposed to the conditions liable to engender that disease, for the tendency of alcohol is undoubtedly to favour the retention of the products of disintegration in the blood. Nor can any advantage be claimed for the employment of alcohol as a drink in cold climates, since it is well known to paralyse the vaso-motor centres, and as a consequence to cause dilatation of the capillaries, allowing a freer current of blood to pass through them, which leads again to undue loss of heat by radiation, evaporation, and conduction, by no means compensated for by its capability of undergoing combustion. The only way in which alcohol could act bene-

ficially as an antiscorbutic is that it might to a certain extent compensate for a great scarcity of food, and perhaps it might give a temporary spur to the system and promote digestion and the action of the heart when the general powers were greatly depressed. It is proper, however, to state that the practical experience of the last twenty or thirty years is not all on the side of physiology, Dr. RAE, or the Good Templars. In THE LANCET of last week, Dr. BUZZARD, the author of the article on Scurvy in REYNOLDS's System of Medicine, shows that, at all events, alcohol must not be charged in a wholesale way with the production of scurvy. Notes compiled by Mr. HARRY LEACH and others connected with the *Dreadnought* Seamen's Hospital, show that cases of scurvy occur most rarely among the crews of ships the members of which are still allowed a "tot" of grog daily, and that men received into hospital repeatedly for attacks of delirium tremens are those who do *not* at any other time come in as the subjects of scurvy, although they all, as a rule, belong emphatically to "long voyage"—i.e., to Australian, New Zealand, or Indian—sailing ships. It has been remarked that the small percentage of alcohol added to mercantile marine lime-juice ought to be discontinued, as unnecessary, and even harmful. But the supporters of this theory forget the patent fact that, since lime- or lemon-juice has been by legal enactments thus fortified and administered, scurvy has decreased 80 per cent. in British merchant-ships, and only now appears in vessels the crews of which have no vegetable diet of any kind, disgracefully bad animal food, and no alcohol.

As it is important that this subject should be, so to speak, "thrashed out" quickly and exhaustively, we would refer those interested in the question to a voluminous Parliamentary paper, headed "Merchant Ships (No. 117)," that was published in the autumn, and includes the evidence and results of all official inquiries on scurvy that have been ordered by the Board of Trade during the past three years. The causes of scurvy are in this paper pretty clearly shown in most cases, and we are enabled to state that in those where the actual cause was undetermined, alcohol was not given to the sailors, either occasionally or as a ration.

We entirely concur with those who maintain that alcohol, except as a medicine, is unnecessary, and practically useless in warding off the ill-effects of cold. Its habitual use, as we have indicated above, renders men less able to withstand the exhausting effects of protracted exertion, and so render them liable to scurvy, in common with many other diseases.

But, as it appears to us, the Temperance party, in their very laudable desire to repress the indiscriminate use of strong drinks, have attempted to prove too much. They have endeavoured to persuade the public to believe that alcohol is *par excellence* a scurvy producer, entirely ignoring the fact that all recognised and well-established antiscorbutic precautions were on this occasion glaringly, and most unfortunately, neglected.

WE have on several occasions alluded to this subject, which was discussed, among other matters, on the 6th ult., at a Council meeting of the Society of Medical Officers of Health. The uncertain tenure under which many of the officers of combined districts hold their office has recently been shown most conspicuously. In two or three cases, where the officers were appointed tentatively for three years, the combination has collapsed at the end of that period. Some of the authorities forming these combinations have preferred, for reasons best known to themselves, to secede, and to appoint a medical officer of their own, who in such cases is given a salary varying from five to twenty pounds, to see, say, and do as little as possible. In spite of all that has been said to the contrary, we must contend that this question of tenure of office is intimately mixed up with the nondescript combination system that at present obtains in various parts of England. Those officers who hold either metropolitan, urban, rural, or port sanitary appointments, under a single authority, may very properly urge their claims to permanency of appointment; and so may also those men who hold office in combined districts. But, we would ask, what sort of surety have the members of the latter class that the authorities composing the combination will not at any time, or at the end of any given term, agree to dissolve, and leave their medical officer with his occupation gone? An example of this sort of proceeding occurred in August last, when the urban sanitary authority of Newmarket seceded from a combination consisting of five rural and two urban districts. The town of Newmarket is, up to the present date, without a medical of health (as the local practitioners decline the office), and we assume that the medical officer of the combination is without the considerable proportion of his income paid up to August by the Newmarket authority. This kind of thing has, as we observed above, occurred already in several cases in the north-west, and will continue to occur as long as discordant elements in the shape of two or three large urban, four or five rural, and perhaps a minute port authority, are, without regard to geography, temporarily united in order to buy, or rather rent, the brains of one man in varying proportions. As there are financial as well as administrative obstacles in the way of making the county the unit, the Local Government Board should put into force the provisions of sec. 286 of the Public Health Act; for until this is done, no agitation for permanent appointments can be effectually or successfully supported. A reference to the 191st section of the Act shows that the Board has the same power "with regard to the qualification, appointment, duties, salary, and *tenure of office* of a medical officer of health," as in the case of a district medical officer of a union—only, however, when any portion of the salary is paid out of moneys voted by Parliament. As matters now stand, it would appear that, in the case of men who hold office under a single authority, and half of whose salary is paid by the Local Government Board, a petition to the latter for permanency of appointment may be reasonably made, and with good hope of success. But in the case of those (and they are comparatively few) who work with a combination of districts, or of those no part of whose income is derived from Imperial sources, no permanency can be assured, even by the Local Government Board, until all combinations, and the rules under which they are formed, are entirely reorganised, and unity of arrangement exists as to the basis of remuneration—i. e., that a moiety of the salaries of all officers shall come out of the public purse.

Annotations.

"*Ne quid nimis.*"

THE CERTIFICATION OF DEATHS FROM SMALL-POX.

IT appears that in 27 per cent. of the deaths from small-pox registered in London since the beginning of the year, the medical certificates gave no information as to the vaccination or otherwise of the deceased patients. The failure to supply this information to a very considerable extent weakens the influence and detracts from the value of those carefully compiled statistics bearing upon the efficacy of vaccination which the Registrar-General publishes from time to time in his weekly and quarterly returns. In Liverpool and Salford the certificates are in this respect even more incomplete than are those in London. Anti-vaccinationists do not even take the pains to disguise their suspicions that there is some sinister motive in so large a proportion of the cases being "not stated" as to vaccination. It is, therefore, desirable above all things that in every certificate relating to a death from small-pox it should, when possible, be stated whether the deceased had or had not been vaccinated. Beyond this, in order to furnish the means for compiling perfectly satisfactory statistics, convincing even to anti-vaccinationists, other information is desirable in fatal cases "after vaccination." In all certificates relating to vaccinated cases in adults it is important to know whether the deceased were vaccinated in infancy, and whether they had been revaccinated. In deaths of vaccinated children from small-pox it is very desirable to know how long they had been vaccinated before the small-pox eruption appeared. We have reason to believe it is not generally known that small-pox has an incubation period of thirteen days before the eruption appears, and hence many children and others who during an epidemic are vaccinated because they are exposed to infection from small-pox cases, are thus often vaccinated after they have contracted the disease. Within our own knowledge more than one death from small-pox have been certified as vaccinated cases when the period between vaccination and the appearance of the small-pox eruption has not exceeded six or eight days; thus clearly proving that the deceased must have caught the disease about a week before vaccination. Even anti-vaccinationists would scarcely maintain that these cases should be classed as deaths from small-pox after vaccination, and yet so long as they are so certified the Registrar-General is powerless to treat them in any other way than as vaccinated cases. If the certificates in these cases gave the date of vaccination, when known, as well as the true duration of the small-pox disease, sufficient data would in most cases be afforded for deciding whether the deceased was under the protecting influence of vaccination at the time small-pox was contracted.

LICENSED LODGING-HOUSES AT THE UNIVERSITIES.

LAST week we published a letter from Mr. G. S. Ward, of Hertford College, one of the delegates for licensing lodgings at Oxford, giving a denial, as far as Oxford is concerned, to the statements made by us as to the neglect of sanitary arrangements by the lodging-house syndicates at both Universities of the houses under their supervision. Our statement was made partly on the strength of personal observation, and partly founded on complaints that have reached us from parents having sons at the University. Mr. Ward assures us that at the present time, in houses applying for a licence, the drainage, water-supply, ventilation, and cleanliness are all attended to, "inquiries made as to the number of inmates, with a view to prevent overcrowding; every sink and closet examined, and the soil-pipes of in-door closets are required to be ventilated." It would have been more satisfactory had he been able to state that all the sanitary deficiencies had been absolutely and efficiently remedied as well as attended to. Mr. Ward apparently makes a distinction between houses that have received a licence and those that now apply for one. In the former instance we are told they have been "inspected and reported on" by a "highly qualified medical gentleman"; but no mention is made of the action taken in his report. In the latter case sanitary details are attended to, and certain precautions required. The fact, however, that the Oxford authorities have undertaken to grapple with these difficulties is highly creditable, and we hope to hear shortly that the Cambridge Syndicate intends to recognise their responsibility in this matter. In giving prominence to Mr. Ward's letter, *The Times* did us and the town of Oxford an injustice in saying it was an answer to an attack by us on the sanitary condition of Oxford. In our article the health of Oxford was not alluded to, nor reference made to its sanitary condition. Our remarks were limited solely to the question of lodging-house supervision; and, so far from singling out Oxford for attack, our comments were equally applied to Cambridge, as the heading of our article clearly indicated.

THE EARL OF MOUNT EDGCUMBE ON LEGISLATION FOR CONTAGIOUS DISEASES.

THE Earl of Mount Edgcumbe presided at the late annual meeting of the Royal Albert Hospital, Devonport, and in the course of his address, moving the adoption of the report of the Managing Committee, his lordship made some remarks on the operation of the Contagious Diseases Acts, which were distinguished by an amount of vigorous sound sense and courage that is quite refreshing. Feeling that he had never expressed an opinion publicly on the question before, and considering that it was one on which it was his duty to do so, his lordship declared it to be his firm conviction that the arguments of those who were agitating for a repeal of the Acts could not bear the test of calm and impartial judgment. In answer to those who, upon moral and religious grounds, objected to the law, as representing the sanction of vice, he declared that when vice had extended, as it had in this instance, throughout the land, and brought with it such fearful consequences, it was impossible to do other than recognise it. And there were only two courses for the Legislature of the country to adopt—one to attempt by penal enactment the suppression of vice, which in this case would be utterly impossible; and the other to attempt, in some indirect way, to lessen the evils consequent upon it. There was but one other course conceivable to his mind, and that would be for the country to shut its eyes to it, and allow it to go on unchecked, disseminating disease, misery, and suffering, not only amongst those to whom it might be considered that the evil courses brought their deserved punishment, not only amongst those whose *lackes* might have excuses which even the most rigid moralists would pity, but often amongst the absolutely pure and innocent. There was another argument also used, said his lordship, as reported in the *Western Morning News*, which appeared to him to be very different—almost contradictory, in fact; it was one which he should almost be inclined to style the immoral argument, and that was that the law was an infringement of individual liberty. If they only thought, for one moment, what the individual liberty was to which the argument referred, he thought it must be a surprise to some of them that that argument came sometimes from the lips

of ladies. Perhaps the argument might be an indication of feeling in their mind of an injustice which they thought the law perpetrated in dealing only with one, and that the weaker, sex. No one could feel more strongly than he that when two people were equally guilty, it was a gross injustice that all the degradation of punishment should rest with one, and the other go free. That he felt would be a monstrous injustice, but he did not think it applied to that case. God forbid that he should speak without forbearance of the most sinful or most degraded, but, at the same time, it was only true to say that the lives of those to whom the provisions of the Acts were alone intended to apply had no parallel in the lives of men. The arguments for the repeal of the law were not deserving attention, providing it could be shown, as he believed it could be, that the law had distinctly been of use in reducing physical evil, and had not done anything to encourage or increase the moral evil; and, at the same time, that the law had not been abused. Attempts had been made to prove abuses, and they had, he believed, in every instance, and in that neighbourhood also, signally failed. The opponents of the Acts could not prove that by their existence the moral evil had been increased, and he hoped as years went on that it would be still further shown that the execution of the law did go hand in hand with every effort to bring religious and moral improvement to bear upon those who were subject to its operations. They would see in the report that that was the case with regard to that hospital—that religious influence was attempted, and with success; and he hoped that the Legislature would be firm, and not allow ignorance or prejudice to undo the work which they had begun, and which he believed, if carried on as at present, would do great good to the country.

TRACHEOTOMY TUBES.

IT is almost a truism to say that the practical efficiency and value of instruments are in direct proportion to the simplicity of their construction. Certainly no better illustration of this could be afforded than was given by two papers read at the last meeting of the Royal Medical and Chirurgical Society. In one of them Mr. Morrant Baker introduced to notice a new form of tracheotomy tube, made out of india-rubber, and in the other Mr. Hulke related a case in which the outer sheath of one of Mr. Durham's instruments became detached, and, slipping down the trachea into the right bronchus, remained impacted there for three days, until it was cleverly extracted, but not before inflammatory symptoms had set in. To the causes assigned for this accident, and the criticism passed by Mr. Hulke upon the form of tube in question, we need not further refer, except to remark that it is only fair to Mr. Durham to admit with him that the instrument used was not made strictly in accordance with his model. With regard to Mr. Baker's invention, we may note that the first case in which his tube was used was recorded in these columns about twelve months ago by Mr. Paley, of the Evelina Hospital (THE LANCET, 1875, vol. ii., p. 834), and the inventor has acted wisely in not bringing the subject prominently forward until he has collected a sufficient number of cases to test the working efficacy of his instrument. Ample testimony was afforded at the meeting in favour of the new tube; but it is matter for regret that want of time curtailed the discussion upon its merits. The serious results that not unfrequently follow the employment of the ordinary metal tube, adding greatly to the dangers of the operation, and always forming a source of anxiety to the surgeon, are happily obviated by the use of this flexible instrument. Theoretical objections to its use may be met by an appeal to the excellent results that have already attended its use. In our "Mirror" for Jan. 25th of the present year, a case of tracheotomy was recorded under the care of Mr. Caird, at the Exeter and Devon Hospital, in which the metal tube could not be borne, and no relief could be afforded until it was replaced by a long india-rubber tube extemporised for the purpose. The chief objection to the use of the flexible tube is that pointed out by Mr. Baker—viz., that it requires a guide for its introduction; and one of the cases he related met unfortunately with a fatal result, in consequence of the nurse being unable to replace the tube, which the patient had herself dragged out. For the same reason—its flexibility, and therefore compressibility—it cannot be employed until a sufficient time has elapsed for the trachea to have become fixed to the surrounding tissues.

THE ARCTIC EXPEDITION.

ALTHOUGH no further information as to the sanitary aspects of this expedition have as yet emanated from the Admiralty, there appears to be an abundant amount of presumptive evidence, all tending to show that, from some reason or other, the hygienic arrangements have been lamentably mismanaged. Our first article on the subject hinted, naturally enough, that some neglect must have arisen. For it appears almost incredible that a picked body of men, the cream of Her Majesty's navy, provided with all the varieties of clothing and all the prandial comforts that the skilled officers of the service could suggest, should be unable to withstand the toil and privations of an Arctic voyage that lasted altogether just eighteen months. No less than twenty-six years ago, M'Clure, in the *Investigator*, spent more than two years in the same regions before a case of scurvy occurred among any of his men. The present Medical Director-General of the Navy was his surgeon, and although it is ridiculous to compare the sanitary equipment of the *Investigator* in 1850 with that of the *Alert* in 1875, it is perfectly clear that the crew of the former were kept in good health by the continued and skilled supervision of their officers. Impressed with the (even then) well-known fact that lime- or lemon-juice was the most efficient and most convenient antiscorbutic known to us, the officers took very special care that every man drank his ration every day under the eye of his own chief. Other sanitary precautions were, of course, also adopted, but the value of the chief antiscorbutic was, in this case, tested very fully and practically. We need not, at this date, ask whether similar precautions were carried out in this last expedition, because all unofficial information as yet gleaned goes to show that, on the sledging expeditions, lime- and lemon-juice were entirely ignored.

It is painful to cast any cloud of criticism on an expedition so nobly conceived; but we are bound, in all justice and honesty, to point out that maladministration or lamentable want of judgment on the part of our naval authorities, has resulted in the death of several splendid men, and has made most decidedly the Arctic Expedition of 1875 a sanitary non-success.

THE CAMPBELL DE MORGAN MEMORIAL.

THE general committee of subscribers to the fund established to provide a memorial of the late Campbell De Morgan met in the Middlesex Hospital on the 24th ult. Mr. A. H. Ross, chairman of the weekly board of the hospital, presided, and among those present were Lord Josceline Percy, Sir Thomas Watson, Bart., Captain Darley, Drs. H. Thompson and Headlam Greenhow, and Messrs. Flower, Sibley, Hyde Hills, Temple Frere, H. Morris, and others. It was announced that the amount already subscribed reached about £596, and it was resolved that further steps should be taken to increase the fund, so as to

enable a fitting memorial to be established in the hospital which was the scene of Campbell De Morgan's life-labour, and with which his name will always be linked. It is proposed for this purpose to open a new Cancer ward which shall bear his name. At present, with thirty-two beds devoted to female patients suffering from cancer, there are but six for male cases. The treasurers of the fund are Messrs. Samuel Scott and Co.; and the honorary secretaries, Mr. George Lawson, Dr. Robert King, and Mr. C. M. S. Chichester, the secretary to the hospital. We hope shortly to be able to announce a large increase in the fund, which has for its object the double purpose of extending the bounds of charity and of establishing a permanent memorial of one whose name will long be cherished by all those with whom he was personally associated.

PHOSPHORUS IN LEUCOCYTHÆMIA.

IT will be seen from the report of the meeting of the Clinical Society which we publish to-day, that a discussion of much interest may be anticipated at the next meeting. Some difference of opinion seems to have existed as to the desirability of discussing the questions raised by the cases reported, and even some doubt as to what those questions were. Undoubtedly a discussion on transcendental pathology, such as seemed to be advocated by the proposer of the adjournment, would be entirely out of place at so practical a society as the Clinical, but there are practical points on which much valuable information may be gained if the true objects of the discussion are kept clearly in view. First of all, there is the question of the action of phosphorus in leucocythæmia. The startling results announced by Dr. Broadbent, and afterwards by Dr. Wilson Fox, as having been gained by the administration of the drug in well-marked cases of splenic leucocythæmia, led to the belief that a specific for the disease had been discovered. Other cases, such as those related by Sir W. Jenner, have shown that in some instances little or no good has resulted from its prolonged action. But a sufficient time has now elapsed since Dr. Broadbent's paper for a large number of cases to have been treated in the same way, and the ultimate issue observed, and we trust that others will follow the example suggested by Dr. Greenhow, and bring before the Society a concise account of such cases, with sufficient details of the symptoms, the stage of the disease, mode and length of time of employment of the drug, and of the results, to form material for comparison.

Another question of great importance, raised by the case recorded by Dr. Gowers, is whether phosphorus employed in ordinary medicinal doses is liable to give rise to degenerations such as those described by him; or if they were due to the drug in his case, whether they depended on idiosyncrasy or previous organic disease. It will never do to admit into our ordinary armamentarium a medicine which will fulfil the old taunt of "curing the disease, but killing the patient." And if such a sequel to the use of phosphorus were anything but infinitesimally rare, it will be doubtful whether it should be given at all until the disease has reached dangerous proportions, and is therefore less capable of cure.

But another question must arise with regard to the cases reported. It is highly important that the class of cases likely to be benefited by the drug should be well understood. With the exception of Sir W. Jenner's cases, none of them would come under the definition of leucocythæmia as ordinarily accepted. Dr. Goodhart's case is, to say the least, an anomalous one. Dr. Broadbent's case, shown at the previous meeting, was a typical one of Hodgkin's disease. Dr. Greenfield regarded his case as one of Hodgkin's disease, presenting some anomalous features, and, amongst others, a decided increase of white blood-corpuscles; but he did not claim for it the title of leucocythæmia. Dr. Gowers's case presented a marked parallelism to it, and the different designation depended on a difference of view as to the pathology of the disease. We do not suppose that it would be desirable to discuss fully the relations of lymphadenoma, lymphatic leucocythæmia, and splenic leucocythæmia; but it is certainly desirable that a clear understanding should exist as to whether all are equally amenable to the action of phosphorus, by what symptoms the favourable cases may be diagnosed, and whether the mere fact of the presence of an estimated excess of white blood-corpuscles is a sufficient indication for its employment. Some valuable light will, we hope, be thrown on the subject, which will aid the ultimate decision of these questions.

DRUGGED TO DEATH.

KNOWLEDGE of the danger of administering opiates to infants is apparently very rare among the lower classes, or, if possessed, is habitually neglected for the sake of the relief to the mother which the drug secures. It is, therefore, very desirable that wide publicity should be given to the cases in which death has clearly resulted from such a course, and such publicity appears likely to be secured to a case which has lately occurred at Cardiff, in which both the parents and the chemist who supplied the drug have been committed for manslaughter. Opiates seem to have been given to the child so constantly that some degree of tolerance was produced, and the constitutional effects of chronic opium-poisoning, rather than acute narcotism, was the real cause of death, which occurred at seven months. The mother had been in the habit of giving the child, soon after birth, syrup of poppies. But the syrup is not a strong narcotic, and so some laudanum was habitually put into the syrup by the chemist at the parents' request to increase its narcotic effect! The chemist used at first to put three drops of laudanum in the medicine, but this having no effect upon the child, the father complained that it was not strong enough, on which the chemist would always put in a larger quantity of laudanum; and the week before the child's death fifty drops were put into a pennyworth of the syrup, and half a teaspoonful was given at a time. This, on the lowest computation, would contain three drops of laudanum. The child was much emaciated, suffered from constant vomiting, the lungs inflamed, the stomach small and contracted. Dr. D. E. Jones, who made the post-mortem examination, gave it as his opinion that death was accelerated by the opium, and of this there can be little doubt. The verdict of manslaughter of the coroner's jury will be at least a much-needed warning to both parents and chemists, and it is to be hoped that it may lead to some restriction on the too ready sale of infants' narcotics.

THE WELD CASE.

UNDER this heading the Indian press, more especially the Madras section of it, has been dealing with a subject that appears to have caused no little commotion in its way. The story is simple enough in itself, and is as follows. A Brahmin was buried near a tank or large pond which forms the principal source of the drinking-water of all classes of the people of Negapatam. Mr. Weld, the assistant collecter, on hearing of this, ordered the removal of the body on sanitary grounds, acting in accordance with the advice of Dr. Beach, the Zillah surgeon. The family of the deceased Brahmin petitioned the Duke of Buckingham, and his Grace has most severely reprimanded Mr. Weld, and suspended him for two months with the loss of his pay and emoluments during that time. Mr. Weld, it must be added, appears to have had throughout the sanction and support of his immediate superior, Mr. Thomas, a collector of some thirty years' service, who is also censured by the Governor in

Council. The points of contention about the case are as to whether the site at which the Brahmin was interred was a burial-place or not, the necessity that existed for exhuming the body, and the method and circumstances under which the law was put in operation. The Madras Government have decided against their subordinates on all these heads. We can only pretend to deal with the matter, however, in its sanitary bearings. It is denied that the place was, or had been for some thirty years, a burial place at all, and asserted, on the other hand, that the body of the deceased Brahmin was surreptitiously interred there. It is alleged in the order of Government that any danger from contamination of the water might have been entirely prevented without the removal of the corpse from the grave; but, however this might be, it is expressly asserted by those on the spot that, spite of the body having been buried at a distance of fifteen or twenty yards from the water, with a thick wall and a large flight of steps intervening, there was grave risk of such contamination, the sandy soil being most favourable to such an occurrence; and as to this we think there cannot be any doubt. It appears to us that on purely sanitary grounds, and in the interest of the public health, Mr. Thomas and Mr. Weld were perfectly justified in their conviction that the presence of the corpse in such a position was a grave source of danger. Negapatam is the town, we believe, from which, as a centre, the cholera epidemic of 1874-75 spread over the whole of the southern peninsula of India, preventing the Prince of Wales's visit to the Anamalays. The most stringent regulations for its improvement have been issued in consequence, and Mr. Thomas, the collector, has earned great praise for the successful efforts he has made in this direction. Mr. Weld was no doubt acting in the spirit thus inculcated when he gave the orders which have resulted in what is, apparently, a very severe punishment.

SMALL-POX AND NEGLECT OF VACCINATION IN HACKNEY.

THE present epidemic of small-pox in London has shown especial fatality in Hackney, no less than thirty-two deaths from small-pox being registered within this union and registration district during the four weeks ending November 25th. Thus nearly 20 per cent. of the fatal cases of small-pox in London occurred in Hackney, although the population of this district is less than 4 per cent. of the population of the metropolis. The last Vaccination Report of the Medical Officer of the Local Government Board throws considerable light upon the cause of this exceptional fatality of small-pox in Hackney. It appears that of the children born in this district in 1873, no less than 20·8 per cent. were returned as unaccounted for—in other words, remained unvaccinated. Now the average proportion of unvaccinated children among those born in the whole of London in 1873 was 8·7 per cent., and ranged from 2·3 and 3·4 in Lewisham and Westminster, to 14·6 and 20·8 in St. Giles's and Hackney. It is, of course, possible that the neglect of vaccination in Hackney, so evident in the returns for 1873, may have decreased during 1874 and 1875, and, therefore, that a smaller proportion of children born in those years remain unvaccinated. If, however, the result for the year 1873 be accepted as evidence of the proportion of children vaccinated in Hackney in recent years, it may be estimated that there are at the present time nearly four thousand unvaccinated children under five years of age living in the district, without taking into account the unvaccinated children and adults over that age. With these facts before us, surprise at the fatality of small-pox at Hackney vanishes, and it becomes important to inquire what steps are being taken by the local authorities to reduce this alarming proportion of material for increasing the fatality of small-pox in North London, due to the neglect of their vaccination responsibilities by the local Poor-law guardians. Vaccination should be vested in local sanitary authorities, instead of the guardians, and then, under the advice and superintendence of medical officers of health, there would be less chance of this dangerous neglect of vaccination, which is in great measure due to the fact that a certain proportion of guardians persist in "keeping their minds open" as to the utility of vaccination,—in other words, lean towards anti-vaccination.

THE ARTISANS' DWELLINGS ACT IN MANCHESTER.

DR. RANSOME, Professor of Hygiene at Owens College, recently delivered the first of a series of "health lectures for the people," organised by the Manchester and Salford Sanitary Association. The subject of the lecture was "Foul Air and Lung Disease," in the course of which he alluded to the fatal effects upon the purity of the air till recently caused by the open ashpit system in Manchester. It was stated that twenty thousand of these abominations have lately been removed from the city, and that the remainder were in the course of removal, at the rate of two hundred per week. After calling attention to the fact that pure air was an impossibility in large towns without good local government, Dr. Ransome urged that the Artisans' Dwellings Act was intended to aid local authorities in opening up crowded portions of towns, and regretted that Manchester had not yet taken advantage of its powers, although few large cities stood so much in need of them. In some parts of the city, especially in Ancoats, he remarked that it is a "mockery to call the houses homes." In support of Dr. Ransome's plea for the adoption of an improvement scheme for Manchester, it may be urged that the average annual death-rate in that city during the five years 1871-5 was equal to 30 per 1000, and exceeded that which prevailed in any other of the eighteen largest English towns, not even excepting Liverpool. Indeed, during 1875, the death-rate in Manchester exceeded that in Liverpool by 2·4 per 1000.

NOTES ON FIJI.

WE have been favoured by the Secretary of State for the Colonies with a printed Report on the Sanitary Condition of Colo, Fiji, by Dr. Macgregor, who was attached to an expeditionary force sent by the Government to Colo. The district is very mountainous, reaching occasionally an altitude of between 4000 and 5000 feet. Thermometrical readings of air and river were taken during twenty-six consecutive days in May. The river was found several degrees warmer than the atmosphere; the average temperature of the former being 66·2°, and of the latter 68·3° F., while two months later the river was 5·1° warmer than the air. Water is very abundant and of first-rate quality. Some interesting information is given of the diseases of the natives. The most common malady of the inland district is coko, or "yaws," as it is termed in the West Indian islands. It chiefly attacks children, the attack lasting from nine months to three years, but the same individual seldom suffers a second time. Next to coko, the most prevalent disease is leprosy, but of a mild type. We are glad to learn that the old native treatment applied to the leper—viz., burying him alive—is falling into desuetude. Ophthalmia comes next in point of frequency; then scabies, Tokolau ringworm, and vidikoso, the latter being characterised by extensive and obstinate ulcerations, persisting in certain cases for ten or even twenty years. It has been compared

to the Delhi boil and Aleppo boil. Not a single case of pulmonary consumption was met with among the people examined. Vaccination has not yet been introduced into the district—a circumstance that should cause the gravest anxiety to the authorities, if they are mindful of the lesson of the late measles epidemic which devastated the island. Small-pox is known to be raging in California and Madagascar, and it would be very easy to import the pest into Fiji. Two questions Dr. Macgregor particularly presses on the consideration of the Board of Health: one, "the prevention of the interchange of disease between Fijians and foreign labour introduced by the Government"; the other is, the desirability of vaccinating all natives and immigrants as they arrive in the colony. An intelligent native would very probably be of opinion that the advent of civilisation is not an unmixed good for his country.

ANATOMY AT THE FINAL EXAMINATIONS.

A "senior student" at the Medical School in Cork has stated that a rule has recently been made by the Professor of Anatomy there, forbidding all fourth-year's students to enter the dissecting room, unless on payment for the third time of the full fee for the course of Anatomy. It is manifest that this is an injustice which should at once be remedied. The regulations of the examining boards have of late insisted more and more on the necessity of an acquaintance with surgical anatomy at the final professional examinations, but if the teachers of anatomy do not allow the senior students the opportunity to refresh their knowledge by inspecting dissected subjects, the attempts to promote the study of surgical anatomy will be rendered more or less nugatory. Our correspondent appears to have paid the ordinary fee for a two-years' course of anatomy, and asks merely to have the liberty of entering the dissecting-room to look at dissections. The request is a reasonable one, and ought to be acceded to without delay.

THE OBSTETRICAL SOCIETY OF LONDON.

WE would call attention to the next meeting of the Obstetrical Society (to be held on Wednesday next, the 6th instant), at which it is expected that a demonstration of transfusion of blood from the living subject will be made by Dr. Roussel of Geneva. It so rarely happens that members of the profession have an opportunity of witnessing this delicate operation, that we do not doubt that numbers of our readers will avail themselves of the occasion to familiarise themselves as far as possible with the necessary operative procedures, and also with Dr. Roussel's excellent instrument.

An important paper, "On the Obstetrical Aspects of Idiocy," will be read during the evening by Dr. Langdon Down, who is recognised as one of the first authorities on the subject of idiocy. Altogether the meeting promises to be one of unusual interest, and we congratulate the Society on its vigorous efforts to advance the science to which it is devoted.

THE SUPPRESSION OF INTEMPERANCE.

THE ingenuity of the philanthropist and reformer is now-a-days taxed to the uttermost in devising schemes for the suppression of intemperance, and it would be hard if none of the projects advocated should prove successful. The most novel legislative enactment against what may be termed the national vice with which we are acquainted has just been put into operation in the Isle of Man. A few days since action was taken at Douglas under the Habitual Drunkards clause of the Isle of Man Licensing Bill, when notices were served on each of the six hundred licensed drinkshops in the town, enumerating the names of certain persons who have been convicted of drunkenness three times within twelve months, and warning the publicans not to supply the same persons with intoxicating liquors for the space of a year. It will be interesting to watch the working of this Act. It, of course, can only be applied to a small town.

SENATOR MOLESCHOTT.

AMONG the numerous distinguished men who have just been raised to the Upper Chamber of Italy, Professor Moleschott, of the University of Turin, must rank the foremost. One of the greatest physiological chemists now living, he has shown in his "Licht und Leben" that he can combine with the severest inductive research the imagination of the poet. This combination has endeared him to the young minds over whom for more than fifteen years he has—at Cavour's instance, we believe—exercised professional sway; and, accordingly, his recent elevation to the rank of senator inspired his students for the coming year with the idea of presenting to him a congratulatory address. On Tuesday, the 21st, the ceremony took place, and the interchange of affectionate regard between pupil and master was spontaneous, hearty, and fresh. In his reply, Professor Moleschott spoke genially of his young ambition to visit Italy, and of the joy he felt when that ambition was crowned by his being called to a chair in the University of Turin. "In this hall," he said, "and in your indulgent presence, I learned to make myself understood in your beautiful language by successive classes of pupils, and now that I have become, so to speak, a molecule in the legislative brain, my efforts will be directed to making myself yet more useful to you and to the science you cultivate."

THE CULTIVATION OF DRUGS.

MOST of the valuable drugs and plants of the physicians are now successfully cultivated in some or other of our Eastern possessions. It is but a few weeks since we recorded the excellent progress made in chinchona cultivation in entirely new districts. It appears that experiments in growing ipecacuanha afford equally gratifying results. A quantity of the dried root grown in Bengal was pronounced, after extensive trial at the hospitals in the treatment of dysentery, to be as effectual as the best South American drug. Quantities of ipecacuanha have now been sent to the Neilgherries, to Ceylon, and to British Burmah for trial, and those qualified to express an opinion are hopeful of success. A plant of less consequence, from a medical point of view—vanilla—does not take kindly to the Calcutta Botanic Gardens, and Dr. King is of opinion that it will never become a staple product of Bengal.

THE NEW MEDICAL SCHOOL OF GLASGOW.

IT would have been a melancholy thing if the removal of the university and the erection of a new hospital in Glasgow had led to the entire disuse of the Glasgow Royal Infirmary as a school of medicine. As our readers know, this is not to be the case. The managers determined, acting under their original charter of 1791, to institute such a school. It was duly opened on the 1st of November, and, if we may judge from the address of Dr. Fleming—well selected by the managers to express their views in inaugurating the new school—it will be conducted in a spirit of wisdom, and with feelings of respect to the other parts of the great Glasgow school, to which the world already owes much. We do not forget that it is possible to have too many schools in a city. But it would be simply monstrous to have an infirmary of 600 beds without a school attached. The school

will have a serious rival in the university, but if its promoters try to secure teachers worthy of the position, and irrespective of all local considerations, the rivalry will be most beneficial, and Glasgow will become, according to present appearances, a rival of Edinburgh, and worthy of the illustrious Cullen, who founded the school by giving his famous lectures on the Theory and Practice of Physic in 1745.

PHYSIOLOGICAL ACTION OF MANCONA BARK.

FROM a careful examination of the bark of Erythrophlæum guineense, MM. N. Gallois and E. Hardy have arrived at the following conclusions. The bark of the Erythrophlæum guineense, employed by some of the natives of Western Africa to poison their arrows, and which belongs to the Leguminosæ, contains a toxic substance of considerable activity. This substance—for which they propose the name of "erythrophleine"—is a muscular poison, and especially a cardiac muscular poison, paralysing the action of the heart more or less rapidly according to the dose administered. Warm-blooded animals die as soon as the heart is paralysed, whilst in frogs life persists for a variable period. In animals poisoned with it the functions of the nervous system remain, to all appearance, long intact after the heart has ceased to beat. In the dose of one-half to one milligramme placed directly on the heart, or of two milligrammes subcutaneously injected, erythrophleine stops the heart of a frog in from five to eight minutes; four milligrammes injected beneath the skin of a guinea-pig proves fatal in the course of a few hours; and four centigrammes, in divided doses, killed a curarised dog of moderate size in one hour and a half. In warm-blooded animals it produces convulsions and extreme dyspnœa, consecutive upon disorders of hæmatosis. In cold-blooded animals it produces progressive stupefaction, which leads to complete resolution of the muscles. The heart is paralysed before either the smooth or striated muscles, consequent on the large volume of blood with which it comes into contact in a given time. In frogs the ventricle stops in systole, the auricles in diastole. In warm-blooded animals the heart is usually found soft and filled with blood, and the poison can be demonstrated by chemical tests in the blood. In the frog the heart beats slowly before stopping, but in the dog its action is considerably accelerated. In the three dogs operated on the arterial tension was found to be augmented. Atropine does not reanimate the heart; curara retards its effects. It is difficult, the authors observe, to say whether Mancona bark will ever be introduced into practice. If sternutatories were still employed, it would certainly take its place amongst them; and it may be observed that, like digitalis, it augments arterial tension.

SMALL-POX IN LONDON.

IT is gratifying to notice that the number of deaths from small-pox registered in London last week was less (43, against 52) than the week before. It would be a great error, however, to regard this as a reason for in any way relaxing vigilance and precautions. We are yet probably only at the beginning of the epidemic, and individuals and sanitary authorities should leave no stone unturned to reduce the number of persons capable of taking the disease. One of the cases specified in the return is that of a man of seventy-two, who had been inoculated in early life; another proof that small-pox itself is not an absolute protection against the disease.

PRINCE LEOPOLD.

WE have authority for stating that H.R.H. Prince Leopold is suffering from a return of the swelling in the knee of a much more serious character than the previous attack.

THE trustees of the Manchester Royal Infirmary will meet on the 4th December, to decide as to the removal of the institution and the sale of the present site. Dr. Renaud has addressed a long letter to the governing body, strongly advocating the retention of the present building. He thinks the advantage of site outweighs the structural defects of the hospital, and that a way may be found to set it in a healthy condition without resorting to the extreme measure of removal, and contends that it "stands on a rock of moral and utilitarian usefulness from which all the blasts of the disaffected and the interested ought not to be suffered to dislodge it unless the sanitary defects of construction can be proved faulty beyond reasonable or too costly redemption."

THE Town Council of Sunderland have adopted a measure proposed by their medical officer of health, Dr. Yeld, which cannot fail to have a beneficial influence on the health of the inhabitants. The scheme deals with the cleansing of the town, and especially provides for the proper management of ashpits and the cleansing of the streets. Under the new arrangement, the eleven thousand ashpits in the town will be attended to every night, and the streets cleansed at regular and frequent intervals. In addition to the good sanitary results anticipated, it is confidently expected that a large financial benefit will accrue to the Council by this reform.

A REPORT of the health of Mile-end Old Town during the past year has been issued by the medical officer of health, Dr. M. Corner. The population of the hamlet is now estimated at 100,000. There were registered in the period 2077 deaths, a mortality which gives a lower death-rate for the district than that for the whole of the metropolis. The Vestry may be congratulated on the fact that no death from small-pox was recorded in the year. Dr. Corner's report is ably arranged, and evinces a thorough and practical acquaintance with the requirements of modern sanitation.

THE scheme for providing the volunteer forces with corps of sick bearers appears to meet with general approval. The promoters continue to receive much encouragement, and we have little doubt that they will carry the movement to a successful issue. A meeting of commanding and medical officers of volunteers will be convened next month for the purpose of making a representation to the War Office, and asking for facilities being given by the authorities for training volunteer surgeons in the system used in the army. We would suggest that a training school be established in the first instance in the metropolis.

A DECISION affecting Poor-law guardians, with regard to the transport of patients with infectious diseases, was given last week. The Metropolitan Asylums Board, in reply to a letter from the Lewisham Union, detailing the difficulties incurred in the conveyance of patients by the relieving officers to the hospitals, stated that it was no part of the duty of the managers to provide means for the removal of patients to their hospitals. Thus the obligation of equipping ambulances is thrown on the guardians.

THE project to provide Clerkenwell with a much-needed mortuary does not mature rapidly. Estimates and tenders were received at a late meeting of the vestry, but after the expression of a hope from one member that the vestry would accept the lowest tender, the matter was referred back to the Sanitary Committee for reconsideration. The obstinacy displayed by the Clerkenwell authority in regard to this matter is truly phenomenal.

THE foundation-stone of a new hospital was laid at Wakefield last Saturday in the presence of a large assemblage of people. It is intended that the institution shall provide fifty-two beds, which number can be extended as occasion requires to nearly 100. The total cost, including furniture, &c., is estimated to reach £20,000, about £14,000 of which will be expended on the building. The hospital is planned on the pavilion system, and will have a length in the main frontage of 287 feet, with a central tower 70 feet in height. It promises to be a commodious and handsome structure.

COMPLAINTS have been made to the Commissioners of Sewers of the "offensive and dangerous effluvia arising from the sewer ventilators in Mincing-lane," and the authority is asked to remove the nuisance speedily. The matter is now referred to a committee. The attention of the Commissioners has also been called to a defective water-supply in Paternoster-square, and a smoke nuisance in Cannon-street. Legal proceedings will be taken, if necessary, to remedy these evils.

THE difficulties connected with the registration of disease exercise the profession abroad as well as at home. In Montreal the City Corporation has proposed a new bye-law to the effect that a fine of forty dollars and two months' imprisonment be imposed on any medical practitioner who shall neglect to report to the Health Committee a case of infectious disease within twelve hours after its occurrence. This extreme measure is, naturally enough, opposed by the profession in the city.

OWING to the difficulty experienced in obtaining nurses and officers for the Hampstead Small-pox Hospital under the Local Government Board's regulations, which requires that a week's notice of a proposed appointment be given, the Central Board, at the request of the Hospital Committee, have suspended this rule. Arrangements have been made with the sisterhood of East Grinstead for members of that institution to take charge of the patients.

THE new committee for the Hampstead Small-pox Hospital has not commenced its work auspiciously. Under an apprehension of danger to the workmen from the reception of small-pox patients the committee stopped the works of the permanent building. The Metropolitan Asylums Board have condemned this action of the committee, and issued instructions to resume the works and carry them out to completion with the least possible delay.

THE overcrowded state of the Hanwell Schools must soon necessitate the erection of additional buildings. There are at present over 13,000 children from the City of London and St. Saviour's Unions in the establishment, a moiety of whom are under partial isolation on account of ophthalmia. The Board of Guardians of the City of London Union have been asked to take the matter into consideration.

WE learn that small-pox is very prevalent in Burnley, and that a hospital devoted to the reception of patients has been opened. About forty cases are now under medical treatment. The occasion of a wedding party at a public-house, where there was a person ill with the disease, was the means of infecting no less than seventeen of the townspeople.

IN Dublin, Bills are being prepared for presentation in the next Parliamentary session, with the object of providing the city with health spaces and recreation-grounds; for opening St. Stephen's-green as a public park, and for the extension of the main drainage.

WE observe that a well-deserved compliment has been paid by the Corporation of London to the sanitary officers of the City, for the manner in which they carried the late proceedings in regard to impure tea to a successful issue.

MR. FRANCIS MASON has been unanimously elected Surgeon to St. Thomas's Hospital in the place of Mr. Simon. Mr. Mason still retains his appointment of Lecturer on Anatomy at the hospital.

THE LONDON WATER-SUPPLY.

WE are glad to see the question of the supply of water to the metropolis is again being brought under public notice and discussion. Last week we called attention to the conference held by the delegates from the various parishes of the metropolis to consider and take steps with regard to the extension of the charges of the water companies in the London district, and to prepare a memorial to be presented to the Home Secretary praying for an alteration of the law with respect to the water-supply of the metropolis. The monthly report of Mr. F. Bolton on the London water-supply comes at an opportune moment for us to offer a few comments and suggestions on this important subject. It appears that a few of the companies are actively engaged in making provision for giving a constant supply in a portion of their districts, under the provisions of the Metropolitan Water Act, 1871. The companies thus honourably distinguished are the Kent, the New River, and the East London. The Act, however, provides power to compel all companies to give a constant supply; and any district may insist upon a constant supply when, and so soon as, four-fifths of the district is provided with the proper fittings for such supply. We would urge that the responsibility of securing a constant supply should not be thrown upon householders. We think it would be impossible to find any district so enlightened as to contain so large a proportion of householders as would voluntarily incur the expense and trouble of putting up fittings to secure a supply the advantages of which they do not as yet fully understand and appreciate. Householders, equally with the companies, ought to be compelled by Government to adopt the necessary measures for the immediate adoption of a constant supply. The sweeping away the abominable leaden cisterns, with their waste-pipes so frequently in direct communication with the sewers, would be attended by an improvement in the public health that it is impossible to estimate. Our readers, who no doubt see to the thorough cleansing of their cisterns at frequent intervals and the disconnexion of the waste-pipe from the drain, would be surprised at the disgusting condition an examination of at least seven-eighths of the neighbours' cisterns could reveal. We do not speak here of houses in the poorer districts only, but of houses and mansions in the richest and most fashionable quarters of the town. How many families will return in the spring to their London homes, and commence drinking the water that has been stagnating for weeks in the capacious cisterns, and which the requirements of the solitary servant, even aided by the demands of house-cleaning, have never been sufficient entirely to empty since the family took their departure in the autumn. If the cistern is covered, then the effluvia and gases from drains rising by the prevailing waste-pipe have time thoroughly to saturate and poison the water; if open, then it is exposed to the no less poisonous contamination of London dust. Nor is the quality of the water generally supplied sufficiently pure to allow it to stand unchanged for lengthened periods even if the poisonous presence of sewer-gas and London dust be excluded. Mr. F. Bolton tells us that the water in the river Thames at Hampton, Molesey, and Sunbury, whence a large quantity of London water is drawn, was good on seventeen days and turbid on fourteen days during October. The condition of the water in the river was good on nine days, indifferent on twenty days, and bad on three days. What is the effect of three days' bad water and of twenty

days' indifferent water on the health of the community? May not many a feverish attack, malaise, languor, &c., be fairly attributable to the distribution of a more potent dose than usual of Hampton and Molesey sewage? When will Londoners sicken and revolt at the idea of drinking the diluted sewage of these riparian towns, and the draining from the manure of the highly-cultivated fields on either side its banks?

The proportion of the community who think seriously on this question, and recognise the evils of the system of drawing the bulk of our water-supply from such a dangerous source as a large river in a densely populated country must ever be, however much protected from pollution by sanitary legislation, is, perhaps, as yet small. Still, it numbers amongst it men whose opinions and views can command attention. Much may be accomplished by these men and the daily press, whose ready and enlightened support has already done so much in improving the sanitary condition of the metropolis, and urging on Government the necessity of prohibiting the supply of water from polluted sources. This probably could not be done unless the Government, or some central authority, undertook the entire management of our water-supply. We are confident that there is an abundance of pure wholesome water to be obtained within a radius of fifty miles from the metropolis without having recourse for one drop to the Thames. The excellent water supplied by the Kent Company from the chalk hills of Kent to the south-eastern districts, and which is practically inexhaustible, should be extended to the whole of the southern and south-western districts. The springs of the rich water district of Bagshot-heath are still available, and would yield a supply of water considerably exceeding the requirements of the western and north-western districts for years to come; whilst springs in the chalk formations of Essex, Hertfordshire, and Cambridgeshire would yield a supply sufficient for the eastern and north-eastern districts. The feasibility of these schemes has already been proved by able engineers, and we need not again discuss them at length. The question of cost, too, has already been considered, and no doubt whilst the water-supply rests in the hands of comparatively small companies no great schemes could be economically undertaken. Under united management and the security of Government, money could, however, be raised at a lower rate of interest than would be possible for any company; this, together with the economy of management under one authority, would enable us to secure the blessing of pure and wholesome water without having to incur a ruinous increase in our rates to pay for it.

EXAMINERS IN ANATOMY AND PHYSIOLOGY.

THE Committee on Examinations in Anatomy and Physiology will meet on Tuesday next to determine the list of Fellows to be recommended to the Council of the Royal College of Surgeons for election as members of the Board of Examiners for the ensuing year. In addition to the members of the present Board who have been nominated for re-election, the following Fellows of the College are candidates for the office—viz., Mr. W. M. Baker, of St. Bartholomew's Hospital; Mr. S. Jones, Mr. Francis Mason, and Mr. Wagstaffe, of St. Thomas's; Mr. Bellamy, of Charing-cross; Mr. Arthur E. Durham and Mr. H. G. Howse, of Guy's; Mr. Pick, of St. George's; Mr. W. Rivington, of the London; and Mr. B. T. Lowne, of the Middlesex Hospital.

LEGISLATION ON THE FACTORY ACTS.

A deputation from the Factory Medical Officers of Great Britain and Ireland is shortly to wait on the Home Secretary to lay before him some matters connected with the Factory Laws, and in reference to the report of the recent Royal Commission on that important subject. With the exception of some points of detail the medical officers are in accord with the opinions held by the Commissioners. The matters to which the medical officers, and with them some of the Commissioners, notably the O'Connor Don, as well as the inspectors of factories, and the employers, as a rule, attach much importance are, the retention of medical examination at each time of hiring, the non-adoption of an age certificate as the sole essential of fitness, and the employment of the certifying medical officers in their sanitary capacity, both as regards the workers and the workrooms. It is also thought advisable not to alter the present system of payment arrangement, for one more irksome to both employer and surgeon and derogatory to the medical profession. Finally, all who have thought over the matter advise an extension to workshops of those provisions of medical inspection which have heretofore worked so well in factories, with the additional sanitary inspection of workshops, now so strongly urged by the Royal Commissioners.

Correspondence.

"Audi alteram partem."

HEY'S AND LISFRANC'S OPERATIONS.

To the Editor of THE LANCET.

SIR,—In the recently published second edition of Mr. Thomas Smith's "Manual of Operative Surgery on the Dead Body," revised entirely by Mr. W. J. Walsham, it is asserted that the operation for the removal of part of the foot at the tarso-metatarsal articulation is often improperly named after Hey; but, in reality, it should be called "Lisfranc's operation." Further on, Mr. Walsham states that Hey's operation consists in sawing through the metatarsal bones just below their proximal ends, instead of disarticulating them.

I have heard this assertion severely criticised by several hospital surgeons and teachers of operative surgery, who maintain that the operation for removal of the metatarsal bones by methodical disarticulation without sawing should be named after the English surgeon mentioned above, and not after Lisfranc. I am given to understand that Mr. Walsham makes a distinction between Hey's and Lisfranc's operations on the authority of a paper which I read before the Abernethian Society of St. Bartholomew's Hospital on March 11th, 1874, an abstract of which will be found in the St. Bartholomew's Hospital Reports for that year.

In Hey's well-known "Practical Observations in Surgery" (edition of 1803), the author, speaking of the risk of leaving a sound metatarsal bone covered with morbid integument when operating on a foot where only one metatarsal bone is diseased, adds:—"Urged by these considerations, I have judged it to be the safer method (and in this opinion and *practice* my colleagues at the Leeds Infirmary have joined me) to take away all the diseased integuments by a tranverse and longitudinal incision made at right angles to each other, and then *to saw off the metatarsal bones as far as the morbid integuments extended.*"

This, then, was Hey's operation. False notions have arisen from two particular cases which he appends, and which have been quoted by gentlemen who appear not to have thoroughly perused the preliminary remarks. In the first he cut away the greater part of the cuboid bone, and gouged the astragalus. In the second he certainly disarticulated the four outer metatarsal bones, but here again he used the saw to remove "the projecting part of the first cuneiform bone, which supports the great toe." In no case is it recorded that Hey disarticulated all the metatarsal bones at the tarso-metatarsal articulation systematically.

On the other hand, Lisfranc, in his "Précis de Médicine Opératoire," terms Hey's operation "amputation *en masse* of all the bones of the metatarsus in their continuity." He devotes several pages to the operation, which he seems in all probability to have first performed, and in which he insists on the methodical disarticulation of all the metatarsal bones, for he dreaded the use of the saw, and speaks of that practice as adopted by Hey as "*chirurgie barbare que l'humanité repousse*" (!).

Hence, although Hey's line of practice was more in accordance with the principles of modern surgery, and did not smack too much of the dissecting-room, as did Lisfranc's procedure, still it is very clear that the disarticulating form

of amputation with total abstinence from sawing was, in principle as well as in practice, inaugurated by the French surgeon. Indeed, the great Leeds surgeon did not originate even the sawing operation, for it was first performed by Turner, of Yarmouth, in 1787.

From the above it seems to me that Mr. Walsham is perfectly justified in using the term "Lisfranc's operation," to signify amputation of the foot by disarticulation of the metatarsal bones from the tarsus, and in describing "Hey's operation" as a removal of part of the foot by sawing through the metatarsal bones, for such he distinctly states was his practice, though he at least twice varied his ordinary routine, yet in both those cases he still cut through bone. The only point in which Mr. Walsham and myself have been inexact is in not naming the sawing operation after Turner instead of Hey. Yours faithfully,

ALBAN DORAN.

Royal College of Surgeons, November 9th, 1876.

HARVEY, BELL, AND MARSHALL HALL.

To the Editor of THE LANCET.

SIR,—The recent Italian movement to push Harvey from his pedestal of fame, in order to set up Cesalpinus in his place, and the death of the relict of Sir Charles Bell, suggest to me that a reminiscence of my student-days in Paris may not be inopportune.

In 1842, attending the lectures of Baron Flourens on comparative physiology, &c., I received a thrill more patriotic than philosophical—for patriotism should have no place in science—on hearing the following emphatic testimony to the commanding position of England in the history of biology.

"There are," said the professor, "three great discoveries which have marked epochs in the history of physiology. These were all made by Englishmen—namely, the discovery of the circulation of the blood by Harvey, that of the functions of the spinal nerves by Charles Bell, and that of the reflex functions by Marshall Hall."

Here, then, is further testimony in support of that argument so well set forth by Mr. Sampson Gamgee in his admirable exposition of the claims of Harvey, in which he insists that the man to whom all posterity has assigned the merit of the discovery, from whom all have learned what they know about it, is presumedly the true discoverer.

It may be interesting to add, that on my coming to settle in London I related what I had heard to Marshall Hall. Dr. Hall wrote to Flourens for confirmation, and showed me the Baron's answer. It was simply "Oui, mon ami, c'est bien cela ce que j'ai dit."

I am, Sir, yours truly,

Grosvenor-street, Nov. 1876. ROBERT BARNES.

THE MEDICAL TEACHERS' ASSOCIATION.

To the Editor of THE LANCET.

SIR,—As the honorary secretaries of the Medical Teachers' Association, we have received from the executors of the late Dr. Sibson, who was treasurer of the Association, the sum of £18 14s. 1d., which was lodged in his hands. The Association has been practically defunct since the last Council meeting on Nov. 17th, 1871, when it was resolved—"That, as the Association had satisfactorily performed during the last four years the objects for which it was originally instituted, and as it did not appear that there were any points connected with medical education requiring the special attention of the Association, it would be expedient that the Association should for a time suspend its meetings." Owing to the death of the president, Mr. Campbell De Morgan, and the treasurer, Dr. Sibson, we are the only officials left; and we request that you will allow us to give notice, through your columns, to the members of the Medical Teachers' Association, that, failing any expression of opinion to the contrary, we shall on Jan. 1st, 1877, pay the sum in our hands to the treasurer of the Medical Benevolent Fund for the benefit of that charity.

We remain, Sir, yours obediently,

HENRY POWER,

Nov. 28th, 1876. CHRISTOPHER HEATH.

UPPINGHAM SCHOOL.

To the Editor of THE LANCET.

SIR,—I see, in your number of the 25th of November, an article on Uppingham School, which is likely to give rise to erroneous impressions. I shall feel much obliged if you will give equal publicity to the following statements:—

An outbreak of scarlet fever occurred in the school towards the end of October. There were seven cases altogether between the 21st and 28th of October. Besides these, two boys were separated as suspicious, but not confirmed cases; one previous to the outbreak, the other on 22nd November. So that, excepting the last suspicious case, there have been no cases since the 28th of October, more than four weeks ago.

The school is not entirely devoid of medical supervision. Since the beginning of the term, I have been residing at Borth, in the capacity of medical and sanitary officer of the school. My time is entirely devoted to the medical supervision of the school.

Believe me, dear Sir, your obedient servant,

CHRISTOPHER CHILDS, L.R.C.P.

Borth, R.S.O., Wales, Nov. 28th, 1876.

*** The fact of a suspicious case occurring subsequent to the other cases, scarcely more than a week ago (Nov. 22nd), confirms our remarks respecting the necessity of exercising extreme vigilance in the matter of medical supervision. "Suspicious cases" are the most dangerous, as likely to be overlooked. During periods when scarlet fever is prevalent, as at present, all the boys on their return to school should be examined daily for at least a fortnight, and subsequently there should be a medical inspection of the school twice in the week. Supervision short of this would have little effect in preventing the spread of the disease from an imported case to others in the school.—ED. L.

MORTALITY OF HOSPITAL SMALL-POX CASES.

To the Editor of THE LANCET.

SIR,—In your last issue you drew attention to the increased mortality of hospital small-pox cases in 1876 as compared with that of 1871–2. Without venturing any comment, will you allow me to submit the statistics of the Homerton Small-pox Hospital in reference to the present epidemic?

Admitted ...	Not vaccinated		121
	Vaccinated...	With good marks, 142	293
		„ imperfect „ 151	
		Total	414
Died	Vaccinated...		13, or 4·4 per cent.
	Unvaccinated		55, or 45·4 per cent.
	Total		68
	Combined average mortality ...		16·4 per cent.

No fewer than 22 cases of the hæmorrhagic type of the disease have already come under observation. If we could exclude these, our death-rate would at once fall to 11·1 per cent.

I remain, Sir, obediently yours,

WM. GAYTON, M.D.,

Homerton Small-pox Hospital, Nov. 28th, 1876. Med. Superintendent.

TREATMENT OF ACUTE RHEUMATISM.

To the Editor of THE LANCET.

SIR,—After reading the letter of Mr. Myers in THE LANCET of November 11th, in which he states that salicylic acid is sometimes adulterated with carbolic acid, I forwarded to Mr. Donkin, our county analyst, a sample of acid from the very bottle which had been used in the treatment of the first of my two recorded cases, and had been supplied to the Radcliffe Infirmary. Mr. Donkin, who has taken great pains with the analysis, finds an appreciable quantity of carbolic acid in the sample in question. It is therefore

more than probable that Dr. Hall's suggestion—a suggestion already made to me by my friend, Dr. Andrew—is correct, and that the strange symptoms of poisoning, which I attributed to the salicylic acid, were really due to the unexpected presence of carbolic acid.

It is to be hoped that my mistake may at least do good service to others by warning them against the indiscriminate use of salicylic acid as at present manufactured; and, further, that the exposure of the mistake may help to vindicate for this acid, when pure, its claim to be regarded as a very valuable addition to the list of newly-discovered medicines.

I remain, Sir, your obedient servant,

High-street, Oxford. H. M. TUCKWELL.

SANITARY GYMNASTICS.

To the Editor of THE LANCET.

SIR,—I shall be glad to be permitted to add my testimony to that of my colleague, Mr. Edmund Owen, and of "A Lover of Justice," as to the value of sanitary gymnastics. I have witnessed and submitted myself experimentally to the movements as practised by Prof. Georgii, and seen excellent results; I also saw Mr. Owen's case before and after the treatment by Dr. Kellgreen, and can corroborate his interesting account of it. The principle on which the Swedish gymnastic treatment is based is physiological, and it is calculated to be of great benefit in many cases of paralysis, and also in the early stage of lateral curvature of the spine and similar affections.

Yours faithfully,

W. H. BROADBENT, M.D.

Seymour-street, November 29th, 1876.

SYMMETRICAL SHORTENING OF THE FOOT.

To the Editor of THE LANCET.

SIR,—When showing the case of symmetrical shortening of the foot at the Pathological Society, I stated that, in my experience, the specimen was a curiosity, not "unique." I recollect to have seen previously another case somewhat similar.

I am obliged to Mr. Biggs for calling my attention to the cases he describes. In results, certainly the cases he refers to, and mine, seem similar. In my case, however, good length (not mere débris) of metatarsal bones and phalanges escaped or were removed.

As a result of rest in the horizontal position, two sores on the sole, and a third consequent on removal (before admission) of the little toe, healed. Amputation was not indicated. The man was sent out of the hospital with a well padded sole, hollowed out to receive a prominent base of metatarsal bone in the centre of the foot.

The other foot was quite normal, had a well developed arch, and was free from callosities.

Your obedient servant,

St. Thomas's-street, Nov. 1876. SYDNEY JONES.

INTRA-THORACIC CANCER AND LARYNGEAL PARALYSIS.

To the Editor of THE LANCET.

SIR,—I hope Dr. Charteris will forgive me for not having read the report of his case of intra-thoracic cancer with laryngeal paralysis, which he published in THE LANCET of Oct. 24th, 1874. If I had had this advantage I should certainly have called attention to his case in my clinical remarks on this subject which were published in your issue of November 18th, as my object, like his, was not to "claim any particular credit" for the observation, but rather to establish an interesting clinical fact arising out of the use of the laryngoscope. Thanking Dr. Charteris for calling my attention to his case,

I am, Sir, your obedient servant,

I. BURNEY YEO.

Hertford-street, Mayfair, Nov. 26th, 1876.

BIRMINGHAM.

(From our own Correspondent.)

THE inaugural meeting of the Midland Medical Society took place on November 1st, and was attended by a large number of the profession of the town and neighbourhood. Dr. Robert Barnes, of London, gave an address on "Pregnancy as an Illustration of General Pathology." A prize of five guineas, given by Mr. Edwin Chesshire, for the best essay "On the Value of General and Local Bloodletting in the Treatment of Disease," was awarded to Dr. Francis Warner; and the Society's Clinical prizes (each of the value of five guineas) to the students of the Birmingham School of Medicine who had passed the best examination in Clinical Medicine and Surgery, were presented to Mr. J. H. Palmer and Mr. C. J. Devis. The examiners reported very highly of the ability displayed by the candidates, and awarded a special certificate to Mr. H. G. Lowe, who was second in both subjects. After the meeting there was a supper in the dining-hall of Queen's College, at which the health of Dr. Barnes was proposed by the President, Mr. Berry; and Dr. Barnes then proposed "Prosperity to the Midland Medical Society," and, in doing so, alluded to the value of such gatherings as this for softening the asperities of professional life, improving their knowledge, and facilitating social intercourse among those engaged in a common duty.

Mr. Alderman Chamberlain, M.P., on resigning his seat as Chairman of the School Board, alluded with satisfaction to the endeavour made by the Board to provide playgrounds adjacent to the board schools, and to their greater size and completeness when compared with those found in most towns. While this is undoubtedly true, more might yet be done in the way of affording recreation-grounds for the children whose chief playgrounds are at present the streets and alleys of the town. There are several open places, as the Park-street and other burial-grounds, which are now unused, and, whose fences being out of repair, are mere repositories for dust and rubbish, which might be utilised for this very laudable purpose. It might also be an advantage to the town if the various churchyards now closed by Act of Parliament, and many of which are both large and centrally situated, were handed over to the corporation for the purpose of being planted and laid out as ornamental gardens, in which the working men and women of Birmingham might find an agreeable resort for strolling or resting.

The fifty-ninth annual meeting of the Birmingham Orthopædic Hospital took place under the presidency of the Earl of Dartmouth, when the report showed that there had been 706 new cases treated during the year, that 378 instruments had been supplied, and 356 operations performed. The financial statement was satisfactory, and the committee proposed to open twelve extra beds during the ensuing year.

Mr. Cross, the Home Secretary, has been visiting the town, with a view of stirring up a Conservative reaction, but the occasion was seized by our Liberal Mayor to entertain him at a banquet, and as the organ of the Liberal, or, rather, Radical Town Council, to thank him for the services he has rendered to the public by his Artisans' Dwellings Act. Mr. Cross, who had paid a visit to the district which is to be dealt with by the new improvement scheme, heartily approved of the course taken by the Corporation, and took an opportunity of urging other corporate bodies to follow their good example. The workmen who will be displaced by the removal of the houses in the scheduled district are to be provided with dwellings on a block of land two acres in extent, already purchased by the Corporation. Scott's Sewage Company (Limited) have since last August been undertaking extensive experiments at the Saltley sewage outfall works, and with so much success that they propose to make an offer to the Town Council to deal with the whole of the nightsoil and sewage of the town.

Our already over-filled lunatic asylum is at last to be extended, the Asylum Committee having acquired 150 acres of freehold land for the election of a second building for the reception of pauper imbeciles and epileptics.

The medical officer of the Coseley Local Board has had to invoke the assistance of that body to declare certain houses unfit for habitation against the will of the occupants,

even though they were exposed to imminent peril every hour by the evolution of noxious gases and vapours from a great body of pit refuse, which had fired by self-ignition. The Local Board wisely acted upon the advice of their medical officer, and closed the houses in question.

Dr. J. Milner Fothergill, of London, read a very interesting paper "On the relation of Gout to Diseases of the Heart," at the last meeting of the Midland Medical Society, which elicited an animated discussion, in which Drs. Russell and Foster, and Messrs. Solomon, Yates, Oakes, and others took part. Pathological specimens were exhibited by Dr. Carter and Mr. Thomas, and cases of clinical surgical interest by Mr. West and Mr. Gamgee.

Birmingham, Nov. 29th, 1876.

PARIS.

(From our own Correspondent.)

THE number of deaths from typhoid fever in Paris was notably less during the past week, and it is now apparent that the epidemic is declining. Thus during the month of October there were 190 deaths; during the first week in November there were 171 deaths; during the second week there were 150 deaths; whilst during the third week the mortality diminished to 103. It is plain also that, although the deaths in October were only 190, to 424 in the three weeks of November, the special cause which has developed this epidemic was more active during the past than the present month, since the average duration of the fatal cases is reported to be about fourteen days.

The mortality in the hospitals, taken as a whole, has been a little in excess of that of the entire city; while the death-rate has been highest where the sanitary conditions are poorest—in the arrondissements of the oldest buildings, the narrowest streets, and the densest population. Strange to say, the disease has been almost exclusively confined to the "native element," and but few strangers, especially among the English and Americans, have been attacked. The large hotels, as a general rule, have escaped the epidemic, so that the regular tide of travel has flowed on without interruption and without detriment to anyone.

Some idea of the virulence of this epidemic may be formed by a reference to the calculation of Dr. Ernest Besnier—the most reliable authority in this regard in France—that *one* in every *six* of those attacked has succumbed, and that the number of typhoid cases can be approximately ascertained by multiplying the total number of deaths since the 1st of October by six. From this calculation, it is apparent that within fifty six days 3684 persons have suffered from typhoid fever in the city of Paris.

As a general rule, the hospitals have been compelled to dedicate an unusually large number of their beds to these fever-stricken patients; and the Administration of Public Assistance has found itself compelled to organise a special service with reference to this epidemic. It is but just to say, in this connexion, that too much praise cannot be bestowed upon the authorities for the manner in which they have acted in the emergency. All that an enlightened science and a broad humanity could suggest has been liberally invoked, alike in the treatment of the disease and in the arrest of the epidemic. I am pleased also to record that their labours have been crowned with success, as is illustrated by the decreased ratio of mortality and the manifest subsidence of the malady itself.

No sufficient explanation has yet been given of the origin of this great epidemic. The special cause which has preceded the strange outbreak yet remains a mystery. Dr. Besnier tells me that "this epidemic is but an exaggeration of the annual exacerbation of typhoid disease which occurs in Paris during the months of September, October, and November, its proportions being due to the lowering (*abaissement*) of the column of subterranean waters underlying Paris, and to the anomalous atmospheric conditions which have existed for the last three months." Dr. Maurice Raynaud, who is making typhoid fever the subject of some exceedingly interesting lectures at the Hôpital Lariboisière, takes the same view, and elaborates it more fully. This is but a revival, however, of the hypothesis of Pettenkofer, and is wanting in the logical exactness and sufficiency which the circumstances of the case require. The explanation, in fact, only substitutes new terms for old ones, and leaves the real question at issue just where it was in the beginning. Various theories have been promulgated in this regard by the laity, the most popular and, perhaps, plausible of which connects the propagation of the disease with the work of demolition which is going on in the track of the new Avenue de l'Opéra and elsewhere. There can be but little doubt that here, as in all other localities, the great factors in the development of the morbific agency to which this epidemic is due, are certain alterations in the conditions essential to a high grade of vital resistance, with definite deficiencies in the hygiene of the individual and of the household. Time will not permit a further discussion of this question at the present moment, and I will adjourn it, with the understanding that whatever may be suggested or established hereafter in connexion with it shall be duly chronicled.

The disease has presented many striking peculiarities. Its violent onset, its essential malignity, and the rapidity and fatality of its march have given a character *sui generis* to the epidemic, and will render it memorable in the history of medicine. Mild cases have been the exception and severe ones the rule. Symptoms have reached their climax and followed each other in so quick a succession as to place the patient's life at once in imminent jeopardy, and in many cases to hurry him to his fate with wonderful certainty and despatch. Sometimes patients have died on the third day, in spite of the most eminent skill, and without manifesting the slightest response to any remedy whatsoever.

The symptoms by which the disease has declared itself have been varied and dissimilar. Sometimes the onset has been by rheumatic phenomena; then again by violent forms of neuralgia; whilst in other cases the initial sign has been a catarrh or cough, or a chill, or a cholera-morbus, or a torticollis, or a cerebritis, &c.

There has also been remarked a notable absence of diarrhœa and of epistaxis. Neither at the *début* of the disease nor at any subsequent stage have these symptoms ordinarily required treatment. Tympanites and abdominal tenderness have also failed to present themselves as particularly marked features of the fever. Restlessness and violence of movement have likewise been seldom seen in the victims of this epidemic; while relapses have been of very infrequent occurrence. Dr. Besnier also informs me that, "contrary to what has heretofore been observed under similar circumstances in Paris, women have been equally attacked with men, and have furnished a much larger proportional contribution to the mortality tables."

Having already extended this communication to an unreasonable length, I must postpone a further description of the disease, as it has recently manifested itself in Paris, until another occasion.

Paris, Nov. 28th, 1876.

Medical News.

UNIVERSITY OF LONDON.—The following is a list of the candidates who have passed the recent Second M.B. Examination for Honours:—

MEDICINE.

FIRST CLASS.

Pepper, Augustus Joseph (Scholarship and Gold Medal), University College.
Hunt, Joseph William (Gold Medal), University College.
Pinnell, Thomas Mark, University College.
Hellier, John Benjamin, Leeds and University College.
Ferrier, John Christian, Guy's Hospital.

SECOND CLASS.

Rogers, Thomas King, University College.
Burton, Samuel Herbert, University College.
Jones, Arthur Henry, Guy's Hospital.
Kidd, Walter Aubrey, Guy's Hospital.
Parry, Thomas Sharp, University College.

OBSTETRIC MEDICINE.

FIRST CLASS.

Hellier, John Benjamin (Scholarship and Gold Medal), Leeds and University College.
Pepper, Augustus Joseph (Gold Medal), University College.
Ferrier, John Christian, Guy's Hospital.
Pughe, Rhinallt Navalw ap Joan, Liverpool Royal Infirmary.
Jones, Arthur Henry, Guy's Hospital.

SECOND CLASS.

Burton, Samuel Herbert, University College.
Rossiter, George Frederick, St. Thomas's Hospital.
Edwardes, Edward Joshua, St. Mary's Hospital.
Rogers, Thomas King, University College.
Kidd, Walter Aubrey, Guy's Hospital.

THIRD CLASS.

Duke, Herbert, Guy's Hospital.
Langley, John Geoffrey, University College.
Lamb, William Henry, Guy's Hospital.

FORENSIC MEDICINE.

FIRST CLASS.

Pepper, Augustus Joseph (Scholarship and Gold Medal), University College.
Kidd, Walter Aubrey (Gold Medal), Guy's Hospital.
Jones, Arthur Henry, Guy's Hospital.

SECOND CLASS.

Langley, John Geoffrey, University College.
Harrison, Charles Edward, St. Bartholomew's Hospital.
Parry, Thomas Sharp, University College.
Rogers, Thomas King, University College.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Nov. 23rd:—

Powell, John, Ewgas Harold, Hereford.
Dring, William Ernest, Beacon-hill, Camden-road.
Taunton, William Whitchurch, Redlynch, Wilts.
Merriman, William Semple, Knutsford, Cheshire.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Richard Tippetts Richardson, London Hospital; Arthur Shipton, King's College; Henry Hoole, Charing-cross Hospital.

IT is stated that eleven out of the fifteen candidates at the recent final examination for the Fellowship of the College of Surgeons were successful. We shall publish their names next week.

HOSPITAL SUNDAY in Belfast will take place on the last Sunday in the year, and the collections made will be given, we understand, to one institution, the Belfast Royal Hospital. It is to be hoped that there may be an improvement this year on the amount obtained, as last year there was a decided falling off from the year previous; and, certainly, less than £600 is a miserable total for so wealthy a place as Belfast.

VACCINATION GRANTS.—The following gentlemen have received, from the Local Government Board, grants for efficient vaccination in their respective districts:—Dr. A. J. Mackintosh, of Downham Market, Norfolk, £11 17s. (fifth gratuity); Mr. T. Lawrie Gentles, South District, Derby, £72 19s (third gratuity); Mr. Julian Willis, New Winchester and Andover Union (second gratuity).

UNIVERSITY OF ABERDEEN.—The following have been appointed examiners—viz.: Robert W. Reid, M.D., in Anatomy; John Urquhart, M.D., in Chemistry and Physiology; James W. H. Traill, M.A., M.D., in Botany and Zoology; T. Maclagan, M.D., in the Practice of Medicine and Pathology; John C. O. Will, M.D., in Surgery and Materia Medica; and Robert Turner, M.D., in Midwifery and Medical Jurisprudence.

TESTIMONIALS.—The trustees and managers of the Islington Savings Bank met on Monday last, the 27th ult., at the Albion Hotel, to entertain Nath. H. Clifton, Esq., F.R.C.S., J.P., of 20, Cross-street, at a dinner, and present him with a centrepiece of the value of one hundred guineas, in token of his connexion with that institution, and (his father before him during a period of sixty-three years) as honorary treasurer.—Mr. Thomas B. Rake, who has been medical officer to the lodge of Odd Fellows mentioned below for twenty-two years, has been presented with a handsome marble striking clock, bearing the following inscription on a silver plate:—"Presented to Brother T. Beaven Rake, M.R.C.S., by the members of the New Forest Lodge of Odd Fellows, M.U., Fordingbridge, in recognition of his valuable services as medical officer of the lodge. 1876."

BEQUESTS &C., TO MEDICAL CHARITIES.—The Edinburgh Royal Infirmary has become entitled to £2000 under the will of Mr. Peter Redford Scott. Mr. Jeremiah James Colman, M.P., has given £1000 to the Norfolk and Norwich Hospital Building Fund. The annual report of the West Sussex, East Hants, and Chichester Infirmary acknowledges the receipt of £1000 under the will of Mr. A. H. Hall, and £200 under that of Miss Johnston, and a donation of £100 from the Rev. Dr. Greene. The Brompton Hospital for Consumption has become entitled to £500 under the will of Mr. Charles Roberson, £100 under that of Mr. J. V. Shaw, and £100 under that of Mr. John Stephens. The Birmingham and Midland Free Hospital for Sick Children has become entitled to two legacies of £300 each under the wills of Misses Ann and Mary Eliza Willmore. The Royal Hants County Hospital, Winchester, has received £1000, less duty and expenses, under the will of Captain Bold, R.N. Mrs. Margaret Boger, of Wimpole-street, bequeathed £100 each to the South Devon Hospital at Plymouth, the Eye Infirmary at Plymouth, and the Albert Hospital at Devonport.

Medical Appointments.

ALLEN, R. G., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Belper and Heage Districts, and Medical Officer to the Workhouse of the Belper Union, vice R. R. Allen, M.R.C.S.E., L.S.A.L., deceased.

BELL, C. E., M.R.C.S.E., has been appointed a Surgeon to the Devon and Exeter Dispensary, vice Roberts, resigned.

BIGGS, M. G., M.R.C.S.E., L.S.A.L., has been appointed House Surgeon to the Essex and Colchester Hospital, vice Fisher, resigned.

BRENNAND, F. J., M.B., C.M., has been appointed Medical Officer for No. 4 District of the Shepton Mallet Union.

BROSTER, J., M.D., has been appointed a Physician to the Royal South Hants Infirmary, Southampton, vice Maul, deceased.

BRYSON, J., M.B., C.M., has been appointed Medical Officer, Public Vaccinator, &c., for the Parish of Eaglesham, Renfrewshire, vice Mack, resigned.

BUCHANAN, J. H., M.D. & L.F.P.S.G., has been reappointed Medical Officer of Health for the Thirsk Rural Sanitary District till the 29th September, 1877, at £50 per annum.

BURNHAM, G. H., M.B., M.R.C.S.E., has been appointed Resident Assistant House Surgeon to the Royal London Ophthalmic Hospital, Moorfields, vice Gunn, promoted.

CAMPBELL, D., M.D., C.M., has been appointed Public Analyst for Calne, and Medical Officer of Health for the Calne Urban Sanitary District, vice Paul, resigned.

CARLESS, E. N., M.B., C.M., L.F.P.S.G., has been reappointed Medical Officer of Health for the Devizes Urban Sanitary District, at £36 15s. per annum.

CARLYLE, J., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parishes of Newhills and Dyce, Aberdeenshire.

DONOVAN, J. F., M.D., C.M., has been appointed Medical Attendant to the Royal Irish Constabulary, Killeagh, co. Cork, vice Foley, resigned.

DYSON, W., B.A., M.D., has been appointed Physician to the Sheffield Public Hospital and Dispensary.

HARNEY, W. R., M.R.C.S.E., L.R.C.P., has been appointed Resident Medical Officer to the Public Dispensary, Stanhope-street, Clare-market, vice Duncan, resigned.

HARVEY, G., L.R.C.P.Ed., L.R.C.S.I., L.A.H.D., has been appointed Medical Officer for the Cromford District of the Bakewell Union, Derbyshire, vice Clay, resigned.

HOLDEN, J., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for No. 4 District, and Public Vaccinator for No. 3 District, of the Preston Union, vice Pilkington, deceased.

LAW, J., M.D., has been appointed Consulting Physician to the Leeds Public Hospital and Dispensary, on resigning as Physician.

MACNAUGHTON, A., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parish of Ardchattan and Muckairn, Argyleshire, and permanently appointed Medical Officer and Public Vaccinator for the Parish of Kilchrenan and Dalavich.

MACPHERSON, C., M.B., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Parish of Tingwall, Shetland, vice Harrison, whose appointment has expired.

MONCKTON, M., L.F.P.S.G., L.S.A.L., has been appointed Medical Officer for the First Division of No. 1 District of the Tonbridge Union, vice Satchell, resigned.

MOORE, J. M., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed Medical Officer &c. to the Dungiven Dispensary District of the Limavady Union, co. Londonderry, vice W. Moore, M.R.C.S.E., resigned.

MUSKELLY, W. J., L.R.C.P.Ed., L.R.C.S.Ed., has been reappointed House Surgeon to the Stanley Hospital, Liverpool.

NORRISH, J., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Beerferris District of the Tavistock Union.

PAUL, R., M.R.C.S.E., L.S.A.L., has been appointed House Surgeon to the Loughborough Dispensary and Infirmary, vice Smith, resigned.

PITHIE, J. Y., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Parish of Ceres, Fifeshire, and Medical Officer to the Adamson Institution, vice Blair, resigned.

ROBINSON, B., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer to the Odd Fellows' Medical Aid Association, Chesterfield.

SMITH, H. A., M.B., F.R.C.S.E., L.S.A.L., has been appointed Medical Officer for No. 3 District of the City of London Union, vice Wilson, resigned.

SNOW, R., L.R.C.S.I., L.M., L.K.Q.C.P.I., has been appointed Resident Medical Officer to Trinity College, Glenalmond, Perthshire, vice Maturin, resigned.

THOMAS, W. R., M.D., has been appointed Physician to the Sheffield Public Hospital and Dispensary.

THOMPSON, A. B., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Casual Wards of the City of London, Thavies-inn vice Wilson, resigned.

WALKER, S. E., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Potton District of the Biggleswade Union, vice Raynes, resigned.

WILDING, L. J., M.R.C.S.E., L.S.A.L., has been appointed House Surgeon to the Worcester General Infirmary, vice Parnell, resigned.

WITHINGTON, J. B., M.R.C.S.E., L.S.A.L., has been appointed a Surgeon to the Doncaster Infirmary and Dispensary, vice Lister, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BROWNRIGG.—On the 21st ult., at Moira, co. Down, the wife of Dr. T. H. Brownrigg, of a daughter.

CARMICHAEL.—On the 28th Oct., at Fort William, Calcutta, the wife of Dr. J. C. Gordon Carmichael, Bengal Medical Service, of a son.

CORFIELD.—On the 27th ult., at Bolton-row, Mayfair, the wife of W. H. Corfield, M.D., Professor of Hygiene and Public Health at University College, London, of a son.

DAVIS.—On the 1st ult., at Shahjahanpur, N.W.P., India, the wife of John Norman Davis, M.D., Army Medical Department, of a daughter.

DUNCAN.—On the 20th ult., at Royal-crescent, Crosshill, Glasgow, the wife of Ebenezer Duncan, M.D., of a daughter.

MARRIAGES.

MOSELEY—COOKE.—On the 21st ult., at All Saints, Kensington-park, William A. Moseley, L.R.C.P.Ed., to Helena Grace, daughter of Major Thomas Cooke.

PHELPS—JONES.—On the 29th ult., at the Parish Church, St. Marylebone, by the Rev. Charles J. Goody, M.A., William Phelps, M.R.C.S., L.S.A., of Freshwater, Isle of Wight, to Maria Elizabeth Susan (Marie), daughter of Major-General Jones, retired Bombay Staff Corps.

DEATHS.

BATTY.—On the 22nd ult., at Stafford-street, Liverpool, Edward Batty, M.R.C.S.E., aged 82.

CAMERON.—On the 19th ult., at Hatfield, Yorkshire, Alexander Cameron, L.R.C.P.Ed.

CLARK.—On the 27th ult., at Havelock-terrace, Westbourne-grove, Bayswater, Esther, the beloved wife of James Edward Clark, Surgeon-Major 2nd Queen's Royal Regiment.

CRESPIN.—On the 24th ult., at Harrington-square, Edgar Reginald Lagassicke Crespin, M.B., of Modbury.

FARRAGE.—On the 17th ult., at Chippenham, William Farrage, L.R.C.P.Ed., aged 55.

HAMILTON.—On the 23rd ult., at Parkstone, Dorsetshire, Andrew Hamilton, M.R.C.S.E., aged 81.

HARRISON.—On the 26th ult., at North Frederick-street, Dublin, Charles Harrison, L.A.H.D., aged 60.

HOOPER.—On the 4th Oct., at View Point, Ararat, Australia, John Hooper, M.D., late of Aylesbury, aged 77.

KING.—On the 26th ult., at Hartest, Suffolk (where he had practised for 53 years), George King, M.R.C.S.E., aged 79.

MACKINTOSH.—On the 28th ult., at Melville-street, Edinburgh, James Mackintosh, M.D., late Surgeon-Major Madras Army, aged 58.

MILLER.—On the 16th ult., at Dumbarton, John Miller, M.D., aged 70.

PETRIE.—On the 2nd ult., at Liverpool, James Petrie, M.D., aged 81.

SMITH.—On the 24th ult., at Pembroke-road, Clifton, Bristol, William Smith, M.R.C.S.E., aged 55.

SMITH.—On the 21st ult., at Barkerend-road, Bradford, Yorkshire, George Priestley Smith, M.R.C.S.E., aged 54.

WILLIAMS.—On the 26th ult., at Wrexham, George Harvey Williams, M.D., late of Rhyl, aged 57.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

THE WELSH COLONY IN PATAGONIA.

THE officers of H.M.S. *Volage* in the early part of this year visited the Welsh colony of Chupat, founded ten years ago on the east coast of Patagonia. The colony, which has now a population of 690, lies about forty miles inland. Much interesting information concerning the people and the country is given by Captain Fairfax in a report just issued. Dr. Edwards, the surgeon of the ship, reports that the general health of the colony is good upon the whole, and he found very few children who were not in perfect health; but there were several cases in the colony requiring medical treatment, and the colony had arrived at a stage at which a resident medical man was absolutely required. Having a little vaccine lymph with him, he vaccinated two children, and left directions for vaccinating others. He noticed that slight wounds appeared not to heal very readily, which may be owing to somewhat lowered vitality produced by the sameness of diet. He observed several cases of dyspepsia, and in some houses tea and bread-and-butter appeared to have been nearly the sole diet for weeks; but in favourable seasons potatoes and other vegetables would be more plentiful. Guanaco and ostrich meat and hares are brought in by hunting parties. Ducks, snipe, and partridges are also obtained. The principal characteristic of the climate is its extraordinary dryness; the skin and lips become parched and cracked, and woodwork shrinks and warps. The rainfall is very small. As a rule the heat is not oppressive, and frost and snow in the winter are generally thawed by the midday sun. The brushwood, which grows nearly everywhere, makes good fuel. Music is one of the amusements of the settlers, and they have their annual Eisteddfod. Produce of the value of £7306 was shipped from the colony in 1875, comprising wheat, Indian rugs, ostrich feathers, &c.

J. T. T.'s questions are being constantly put to us in various forms. We shall endeavour to give a full answer to them next week.

THE HEALTH OF MUNICH.

THE greatest city of South Germany—a renowned seat of learning, a centre of literature, music, and art,—Munich has also maintained an unworthy reputation for her high death-rate and her backward public hygiene. Her Town Council, however, is determined that the discreditable contrast shall exist no longer, and already it has made considerable progress in canalising the city on an extended scale, with a view to a proper water-supply. In advance of this grand undertaking, a new central slaughter-house has already reached notable dimensions, and the establishment of a civic sanitary office is in immediate contemplation. When the Hygienic Institute has become a *fait accompli*, and "crowns the edifice" of the general sanitary system of which the above-mentioned undertakings are parts, the Town Council flatters itself—and not without reason—that Munich will stand second in salubrity to no other city in Europe. The representatives and friends of the great hygienic cause, of whom Munich can boast as many as any other centre of population in Germany, met the other day to welcome among them Dr. Struck, the Director of the Imperial Sanitary Department, recently created in Berlin. The meeting was thoroughly satisfactory on both sides, and the sanitary reformers of Munich had the pleasure of finding their plans approved by the official hygienic authority in North Germany.

X. Y. Z.—Yes.

ALCOHOL AND CLIMATE.

To the Editor of THE LANCET.

SIR,—As I can speak from some little experience on this subject, perhaps you will allow me space in THE LANCET for a few cursory observations relative to those of your correspondents, Drs. Trentler and Rae, which do not exactly go to confirm what they have said.

I practised ten years ago in the north of Scotland, where I was necessitated to travel long distances on foot, both summer and winter, sometimes twenty or thirty miles in a stretch, where no horse nor carriage could be taken, with often two feet of snow on the ground, and it is a matter of fact that I have derived much good from small quantities of whisky mixed with water at intervals of from two to three hours. The effects of it in my case were not debilitating, but strengthening and invigorating, more particularly after some small luncheon, which generally with me consisted of oatcake and cheese, and which I invariably carried with me. I have travelled ten thousand miles over mountain and glen in Scotland, professionally and otherwise, and my experience is that *moderate quantities* of good whisky at regular intervals during long and protracted journeys, where muscular expenditure is very considerable, are beneficial—nay, add to the power of endurance, especially in the cold winter seasons, when the temperature is low; and I have yet to learn that a judicious use of stimulants under such circumstances is hurtful or even contrary to any physiological law yet discovered. I admit, however, as I shall state in the following part of this communication, that change of climate and temperature have a material effect in this respect.

After leaving Scotland I went to reside in the south of England, not far from Land's End, where I found the climate very different. When in Scotland I had twelve to fifteen degrees of frost, ten inches of ice, and perhaps two feet of snow; I found there strawberries growing in the open air, and to my surprise I found also that one ounce of whisky had as much effect on my system as three in the north. Explain it how you will, this was a fact; and this year, when travelling in France, I found that a smaller quantity still had an equal effect with the larger quantity in the north, and this may explain to a certain extent why the French people use so little alcohol, light wines being chiefly their beverage. It would be interesting to know the opinion generally of those who lately returned from the Arctic regions on this question. I may add that this change with the change of climate was fully felt and recognised by a professional friend who travelled last year with me in the Highlands of Scotland and this year in France, and who had, besides, ample experience in a foreign country.

My conclusion is, that the effects on and the requirements of the system with regard to stimulants change with change of climate and temperature, and that in proportion as one goes northwards so will be the need and effects of stimulants and *vice versâ*.

I am, Sir, your obedient servant,
ANGUS MACKINTOSH, M.D.,
Medical Officer of Health, Chesterfield.

Chesterfield, Nov. 25th, 1876.

To the Editor of THE LANCET.

SIR,—Whatever may be the opinions of scientific men as to the anti-scorbutic powers of alcohol, there can be no doubt as to its injurious effects under exposure to severe cold. This is point strongly insisted on by the late Dr. Parkes, and no one who has had the benefit of his teaching, and also any experience of cold climates, can have the least doubt on the subject. In the Hudson Bay Company's service it is well known that the use of spirits is forbidden, except under special circumstances. The responsible officers in the North Pole expedition seem to have made the fatal mistake of allowing spirits, and not lime-juice, in the prolonged sledge expeditions, and the public have a right to know by whose authority such orders were given. Is it not probable that the comparative freedom from scurvy, and the greater stamina under the most trying circumstances in which human beings can be placed, shown by the officers in these expeditions, was due to their less consumption of spirits? I am, Sir, yours &c.,

Reigate, Nov. 21st, 1876. J. WALTERS, M.B., &c.

F. B. M.—The measures adopted were judicious; but they do not ensure perfect immunity from infection. The patient should have been isolated from the first.

CARBOLIC ACID.

To the Editor of THE LANCET.

SIR,—In your issue of to-day, among answers to correspondents, it is stated, "There is no antidote to carbolic acid." Huseman, however, says that the saccharate of lime is an efficient antidote. The ordinary liq. calcis saccharatus (B.P.) may be used for the purpose.

I am, Sir, obediently yours,
F. DE HAVILLAND HALL, M.D.

Queen Anne-street, W., Nov. 25th, 1876.

THE COLD BATH IN THE TREATMENT OF ENTERIC FEVER.

THE cold bath in the treatment of typhoid appears to be pretty extensively employed in the United States. We learn from a contemporary that at the St. Francis' Hospital, whenever the temperature rises above 103·2° F., the patient, if possessed of average strength, is promptly immersed to the neck in water having a temperature of 85° to 90° F., and cold water is then steadily added until a bath having a temperature of from 58° to 60° is obtained. After remaining in the bath from ten to twenty minutes, the patient is removed, rubbed dry, enveloped in a blanket, put to bed, and an ounce of brandy given to him. As a rule, the temperature is found to be reduced from 2·4° to 4° F. One patient, with a second attack of unusual severity, had the bath administered to him forty-six times in the course of thirteen days; at the latest date he was convalescent. When the eruption is abundant and of a deep red colour, the bath is considered contra-indicated, and recourse had to quinine, which occasionally is given in doses of from twenty to thirty grains.

Mr. James Lane's Harveian Lectures shall be published.

THE "PRESS" A CONTAGIOUS MEDIUM.

To the Editor of THE LANCET.

SIR,—Cleanliness, in the comprehensive sense of the term, is so essential to the commonwealth, and its neglect so significant of general decline, that I need make no apology for citing the following case as an example of the proverb, "If one meddles with dirt, some of it will stick."

My little boy became very restless for several nights, and refused to be comforted or be put to sleep, in spite of all paternal coaxing or threats of castor oil. My own siesta was much broken by his insomnia and scratchings, and I began to think my son was grievously possessed with some evil spirit. Unwilling to draw my conclusion, however, from such insufficient premises, I reserved my verdict. The sequence will show the wisdom of this reservation. Happening to go into the nursery when my little boy was getting his usual morning bath, I discovered he had the itch, particularly well marked over the front of the left elbow-joint and over the outer half of the dorsum of the corresponding foot. The crop was perfectly symmetrical, and after two applications of the sulphur ointment, followed by plenty of soap and warm water, it disappeared like magic. The soil the parasite alighted on was evidently unfavourable to its reproduction. Now for the detection of the contagion carrier. I had not long to wait for the discovery of the culprit. The newspaper boy, who goes the round of this coast, presented himself at my door with his budget of literature, and whilst handing me my usual daily paper I observed his hand was blossoming with itch. On inquiry I found my little boy was in the habit of receiving the newspaper from its vendor, and fond of fraternising with him, being too young yet to understand the arbitrary and artificial distinctions of the animal kingdom. The "press," then, otherwise so clean in itself, received the stamp of contagion in the hands of this young Ethiopian, and became the medium of propagating that which it so strongly condemns. As to the popular nomenclature of the disease—viz., "Scotch fiddle,"—I fear it is a misnomer. The Jew's harp is just as appropriate a name; for the ramifications of the disease are much wider than its name implies. As to its genesis, Eastern mythology may attribute it to supernatural agency; but in this enlightened century the spontaneous evolution of dirt is the only rational explanation of its birth. Its death is a consummation devoutly to be wished for. Finally, for the antidote. Its general application would be attended with much difficulty, if not danger, I fear. Which is more formidable, Mr. Editor, the "Scotch fiddle" or the "Scotch thistle"? The former has nothing in common with the latter, save in the motto, "Nemo me impune lacessit." To plunge the unwashed of Christendom suffering from this disease into a pit of sulphur would be so perilous a task that I fear we must wait for the great day of cremation to accomplish it. In the meantime something on a less gigantic scale might be done to prevent this abuse of the "press" and the spread of contagion. Philanthropy might play a great many tunes on this touching instrument, the Caledonian fiddle; but I refrain from piling up the agony, and trust to you, Mr. Editor, to scratch up the backs of our pachydermata to a sense of their unclean state.

I am, Sir, yours truly,

Strone, near Greenock, Nov. 1876. R. G. M'CALMAN, M.D., C.M.

An Inquirer.—The case of "Dr. Hamilton," before Mr. Knox at the Marlborough Police Court, was adjourned till Wednesday, the 13th inst., when, we understand, most important evidence will be forthcoming. It is highly creditable to the Medical Defence Association that they have discovered, and verified by inquiry of the American Minister, that there is no Metropolitan College of New York. We learn upon good authority that the General Medical Council are taking active steps in reference to this matter.

HORSEHAIR FOR THE DRAINAGE OF WOUNDS.

To the Editor of THE LANCET.

SIR,—I wish to call attention to a means of drainage for wounds, suggested by Mr. White, surgeon to this hospital. Lister's method is used in its entirety here, and the carbolised catgut drain, as recommended by Mr. Chiene, of Edinburgh, had been adopted; but, from the increased cost incurred by its use, horsehair has lately been substituted for it. A coil, varying in number of strands according to the depth of the wound, previously prepared by long soaking in the strong carbolic solution (1 in 20), is passed through the wound in the usual way, and, when deemed advisable, strands are taken out until the whole be removed. Catgut is superior to horsehair, on account of its being capable of absorption; but the capillarity of horsehair, from the increased number of threads, is greater. Horsehair is preferable to india-rubber drainage-tube, because of its unirritating properties and freedom from any ingredient calculated to impede the healing process. Hair cannot be surpassed as a suture in wounds where traction is not great, no harm or inconvenience arising, even though the sutures be allowed to remain after complete union has been secured, and from this fact it was considered suitable for the purpose of drainage.

My desire in writing this is to suggest a means of economising, without interfering with the main principles of treatment as advised by Prof. Lister.

Your obedient servant,

L. W. MARSHALL, M.D., Resident Surgeon.

General Hospital, Nottingham, Nov. 20th, 1876.

R. C. S.—The subject of the next Astley Cooper Prize is "The Anatomy, Physiology, and Pathology of the Sympathetic Nervous System." Essays must be sent to Guy's Hospital on or before January 1st, 1877, addressed to the Physicians and Surgeons of the Hospital.

B. R. R.—Such conduct is reprehensible; but we are afraid no satisfaction would be obtained by the publication of our correspondent's letter.

THE INDIAN MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—While discontent reigns among the members of the army medical department, and the public papers and medical journals teem with their complaints, those belonging to the sister service—the Indian medical—are generally looked upon as having been more fortunate in their selection of a career, and as exempt from the many grievances and injustices to which their fellow-workers are subject.

While admitting that, as regards pay in the junior ranks, the Indian has certainly the advantage over the Queen's service, I think the popularity of the former rests more upon what it has been than what it now is, and that many men soon after their arrival in this country find the prospect they are called upon to realise very different from that which they anticipated before leaving home. With a view to enlightening those who have still to enter the service, and to prevent their subsequent disappointment, I shall, with your permission, notice a few of the causes which disgust many officers at the beginning of their service.

Formerly the medical officer was given £100, and allowed to find his own way out to India, which he usually did as a first-class passenger in one of the Peninsular and Oriental steamers. Now Government saves him that trouble, and kindly provides him with a passage in a troop ship, which means being crammed with two other unfortunates into a small cabin below the water line, or slung in a hammock in the central space among the subordinate officers of the ship. In return for this accommodation, which only those who have experienced it in the Red Sea in October can appreciate, he has to take his turn of duty. Arrived at Calcutta, he is ordered to do duty at the Presidency General Hospital, and qualify himself for passing the lower standard examination in the languages. This period is supposed to extend over six months, but he is often posted to a military or civil appointment within as many weeks. "What luck!" the unwary might exclaim, but here he meets with his first disappointment. From the memorandum sent to him from the India Office prior to his examination at Burlington House, the candidate is led to expect, after his arrival in India, unemployed pay at the rate of 286 *r.* a month until he passes his examination in the vernacular, when, should he receive charge of a native infantry regiment, he becomes entitled to 450 *r.* To the unsophisticated youth, ignorant of the system of officiating appointments, this seems fair enough. I cannot describe the other and true side of the picture better than by relating my own experience.

Within a month after my arrival in Calcutta, and before I had time to learn more than a few words of the language, I found myself put in charge of a native regiment, to march in a few days. With sixty men sick, to or from whom I could not communicate or receive a single idea, and with all the arrangements for their conveyance on the march to make, I was in no enviable position, and I thought that if anyone deserved to be soothed with 450 *r.* a month I did. Alas! I had not passed the lower standard examination; and although Government considered me competent to undertake the responsibilities of the appointment, I was not eligible for the pay. At the same time I had all the expenses of the march and my share of the regimental entertainments after our arrival at the new station to pay for, while subscriptions for the mess, band, book and billiard clubs, &c., were deducted from my so-called unemployed pay of 286 *r.* per month. As a consequence I became involved in debt, but was comforted with the hope of recouping myself when I should pass the lower standard examination. This I did six months after my arrival in the country; but was told that, as I was officiating for another officer on furlough, I was entitled to only 336 *r.* On this I remained for nine months longer, when the charge became vacant, and I received the full pay. I was more fortunate than many others, who are knocked about from one officiating appointment to another for five or six years. And here I may remark that the positions taken at the entrance and exit examinations at Netley are no criteria whatever of the appointments given in this country.

The Indian medical, like other services, has suffered from the cheeseparing economy of the time. Formerly pickings were to be had in the shape of extra allowances for the charge of detachments of other regiments, lock hospitals, and station staffs. Now the regimental surgeon receives nothing for a detachment less than a wing, for which he gets 75 *r.* a month; while the latter appointments are frequently given to Queen's men.

Finally, with regard to leave. By the same memorandum from the India Office to which I referred we are promised two months' privilege leave in the twelve on full pay and allowances, subject to the exigencies of the services. Practically this may depend upon the particular views of a general commanding the division, who may refuse to grant it at his pleasure, although recommended by the deputy surgeon-general of the circle, who ought to be the most competent to judge of the circumstances of the case.

Trusting you will give this letter room in your journal, and that it may fulfil the end for which it has been written,

I am, Sir, yours obediently,

India, October, 1876. A REGIMENTAL SURGEON.

To the Editor of THE LANCET.

SIR,—As a competitive examination for twenty-seven vacancies in the Indian medical service will take place in February, will you allow me to direct public attention to the undermentioned scale of pensions granted to medical officers. It must be borne in mind that in the hot and relaxing climate of the tropics all officers require, after a few years, some change and rest from their duties, and that all leave granted counts against the period of service required for pension. It is upwards of a quarter of a century since I sailed for India, and having taken the ordinary period of leave I find myself and family with a pension of less than £300 a year to live upon; but where or in what style of society we must live I will leave your readers to imagine.

After 17 years' service in India ... ... £220 per annum.
" 21 " ... ... 293 "
(Including only two years' leave).

Your obedient servant,

November, 1876. AN INDIAN ARMY SURGEON.

BOARDING-OUT OF PAUPER CHILDREN.

THE testimony of Mrs. Nassau Senior, of Mr. John Skelton, Secretary to the Board of Supervision in Scotland, and of others, to the beneficial effects attending the segregation of pauper children by placing them in suitable households, is, we think, sufficient to warrant its more general adoption. The guardians of the Darlington Union have, it seems, recognised the benefits of the system, and have appointed a committee to inquire and report on it. The plan has been in operation in Scotland for more than a quarter of a century with eminently satisfactory results, and has received the sanction of a large number of philanthropists who have studied the disadvantages incident to the aggregation of children in pauper schools, and the value of the domestic influence brought to bear on the little ones by the boarding-out system.

H. G. D.—We regret we cannot assist our correspondent.

TOBACCO POISONING.

To the Editor of THE LANCET.

SIR,—G. W., a wire-drawer, had been complaining for several weeks of sleepiessness, headache, vomiting, and constipation. Had no hernia. On inquiry I could find no cause to account for the illness until the man's wife informed me that he was in the habit of smoking as many as six pipes of tobacco before breakfast, and continuing it pretty well all day, using small, dirty pipes. He was a well-built man, of dark complexion. Temperature 97·2°; lips pale; teeth good, but dirty and stained; tonsils enlarged; tongue red and dry; gums pale and parched; appetite poor; a feeling of weight and distension in the abdomen; flatulence and nausea; vomiting and purging; bowels very torpid; liver enlarged. There were palpitation and pain in cardiac region; heart-sounds normal, but weak; systolic murmur in aortic area and in course of large vessels; pulse 60, regular, small, and weak. Blood thin; red corpuscles scattered, non-confluent, and crenated. The respiration was slow; he had cough, with dark sputa; throat dry and irritable; voice weak. The skin was clammy and cold; no eruption. Reproductive system normal. The quantity of urine was small and dark in colour, specific gravity 1025, acid reaction; deposits urates and mucus, no albumen or sugar. He complained of pain in the head and eyes; pupils dilated; noise in the ears occasionally; taste bad. Reflex and voluntary motor functions weak. Sleep bad and disturbed by dreams. Muscles weak and flabby. The diagnosis was tobacco-poisoning. The treatment adopted consisted of an active purgative (enema if necessary), two pipes per diem, long clean pipes to be used. As an eliminant, two tablespoonfuls twice a day of a mixture consisting of spirit of nitric ether, three drachms; tincture of digitalis, one drachm and a half; infusion of oranges, eight ounces. In two weeks he was ordered tincture of perchloride of iron, two drachms; tincture of nux vomica, one drachm and a half; infusion of gentian to eight ounces. In five weeks he was perfectly well.

None of the symptoms were specially treated, except the constipation. The general treatment included wine and good diet. The progress to recovery was steady, the constipation lasting longest.

I remain, Sir, yours &c.,

Tintern, Monmouth, Nov. 1876. G. H. H. DE WOLFE, M.D.

General Practitioner.—YES. A case of hydrophobia is published by Offenberg in the *Wien. Med. Presse* of the present year, in which hypodermic injections of curare, to the number of seven, about three grains of the drug being administered in all, were followed by ultimate recovery.

Dr. Ogilvie Will.—Soon.

MILITIA SURGEONS.

To the Editor of THE LANCET.

SIR,—When the meeting of militia surgeons was held on the 14th inst., the following resolution was passed, as we had some faith in the promises of Mr. Hardy, and believed that cases of hardship and loss would be fairly considered, as guaranteed by both himself and Lord Cardwell:—

"That, taking into consideration the statement received from the W. O., dated September 18th, 1876—viz., 'That a militia surgeon's election to be placed on the departmental list would be without prejudice to any claim he may consider he has to compensation for loss of emoluments,' this meeting sees no objection to those surgeons who are desirous of remaining in the service placing their names on the departmental list."

On the 15th was issued the following decisive letter. Financial Off., W. O., signed John Milton:—

"I am directed by Mr. Hardy to acquaint you that, after a very careful investigation into the claims preferred by the surgeons of militia generally, he regrets that he is unable to discover sufficient grounds to justify him in submitting to Parliament a vote for the grant of compensation for any reduction they may have sustained in their emoluments by the adoption of the measures prescribed by the recent Royal Warrant."

This, Sir, is in the face of the answer given to Dr. Lyon Playfair in the House of Commons, Aug. 9th, 1876—viz.:

"Until 31st December it would not be known how many officers would accept the terms which had been offered, and until that time he could not form any definite opinion or give any pledge as to compensation."

Do you consider, under these circumstances, we should be justified in deserting the Act under which we hold? I feel confident that if we accept any new terms we shall be pointed to as acquiescing in the attempt at the wholesale confiscation shadowed forth in the new Warrant, and endorsed by Mr. Hardy.

I would again ask my brethren to keep their M.P.s well posted in the hardships of our case, for it is to them we must look.

I am, Sir, yours &c.,

Nov. 27th, 1876. MILITIA SURGEON.

HOSPITAL SUNDAY.

To the Editor of THE LANCET.

SIR,—I shall feel very much obliged if gentlemen who are on the Hospital Sunday Committee in London, Birmingham, Liverpool, Sheffield, and other provincial towns will kindly reply to the following question through your valuable issue before Christmas:—Is it the custom to give tickets of recommendation to the clergy who preach the sermons, according to the amount of their collections; if so, on what conditions? It appears to me the loss will be greater than the gain. Yours truly,

November 27th, 1876. HOSPITAL PHYSICIAN.

RESPONSIBILITY OF THE INSANE.

AT the International Medical Conference a paper on this subject was read by Dr. Ray, of Philadelphia. After the discussion which ensued the following conclusion was adopted by the section:—"That there is at present manifested a tendency to hold the insane responsible for the commission of acts; that this tendency is unjust, unphilosophical, and contrary to the teaching of pathology, which clearly points out that insanity is the expression of disease."

Mr. C. Baker Gabb.—We shall be glad to publish the notes.

COLD TEA *versus* ALCOHOL.

To the Editor of THE LANCET.

SIR,—May I be allowed to add my testimony in favour of cold tea as a beverage in all sporting and other excursions requiring sustained physical vigour.

A few years ago, at the commencement of the hot season, I accompanied a civilian (a well-known Nimrod in that part of India) on a tiger-shooting expedition, extending over three weeks, in the Nepaul forest, at the foot of the Himalayas. My friend, a man of keen nervous temperament and in excellent health, had been recommended to always drink bottled bitter beer twice a day—at luncheon and at dinner,—and he continued this practice in the forest. I drank nothing but cold tea throughout our trip. Every evening, shortly after dinner, my companion "turned in" quite exhausted; whilst I withdrew to my own tent (we had our meals in his), and read or wrote, quite fresh, till midnight, rising at five the next morning, ready for another day's exertion.

I could adduce from my own experience, extending over many years in a tropical climate, several other instances, showing that tea, where it is not contra-indicated, is, in moderation, one of the best beverages, if not the very best, we possess for assuaging thirst and maintaining nervous energy; its use not being followed, moreover, by the depression which, as a rule, succeeds that of alcoholic stimulants.

I am, Sir, yours truly,

C. R. FRANCIS, M.B. Lond.,
Surgeon-General, H.M.'s Indian Army (Retired).

Sutton, Surrey, Nov. 25th, 1876.

Therap.—The extract obtained from a tree indigenous to Brazil, and belonging to the botanical species *Aspido sperma*, has, we believe, been suggested as a substitute for tannin.

Miss A.—We would advise our correspondent to have nothing to do with the party or the matter.

"A CAUTION."

To the Editor of THE LANCET.

SIR,—I am pleased to say that last evening I gave the man alluded to in Mr. Larkin's caution into charge, and he was brought up at Worship-street this morning, when Mr. May, of the Holloway-road (with whom I had communicated, knowing that he had been robbed), further charged him with stealing a case of instruments of the value of £15, on which the magistrate committed him for trial, but remanded him for a week on my charge of coming to my house with intent to commit a robbery, so as to give time for others who have been victimised to prosecute. The prisoner pleaded guilty, and said that poverty was his excuse, which the magistrate seemed disinclined to believe, as he was fairly well dressed; he also said that he had been a student "at one of the metropolitan hospitals," which may account for some of the robberies that had been committed at some of those institutions. His name, Rogers, is doubtless fictitious, and he refused his address. The case will come on again next Wednesday at eleven o'clock at Worship-street, when I hope others who have been robbed will attend to prosecute, and bring any witness that may be necessary to substantiate his identity.

Yours faithfully,

Hackney-road, Nov. 29th, 1876. FREDERICK WALLACE.

Mr. C. Thorp.—There is not, so far as we are aware, "a little book on the Causes and Cure of Cramps."

Nemo.—We think it better that the notice should be sent to the paper by our correspondent's solicitor.

BISULPHIDE OF CARBON AS A DISINFECTANT.

To the Editor of THE LANCET.

SIR,—My attention has been called to an article by Mr. Keates in your issue of Nov. 18th, pointing out the value of the vapours evolved from burning bisulphide of carbon as a disinfectant. Allow me to state that the use of those vapours is by no means new. I have employed them exclusively for more than six years for disinfecting rooms, and have in this way used six hundredweight of the liquid in my own district. Indeed I have publicly advocated the employment of the bisulphide in place of sulphur for some years past, and I have reason to believe that other medical officers besides myself are in the habit of using it. No special lamp is required for the purpose of burning the liquid. It may be placed in an open dish, supported on a tripod, and ignited by an ordinary match.

I am, &c.,

St. Pancras, Middlesex, Nov. 30th, 1876. THOMAS STEVENSON.

A CIRCULAR.

To the Editor of THE LANCET.

SIR,—In the interest of professional matters I send you the enclosed. This circular was sent to every house in the village of Calverley, showing the numerous friends live far apart. In a local paper for many weeks there was an advertisement to this effect, "that it had been reported that Dr. Pitts was about leaving the neighbourhood. He (DR. PITTS) wished to inform his numerous patients and friends that such was not the case, and that he might as usual be consulted at The View, Pudsey."

I have had several letters from medical friends, saying it was my duty to send the circular to THE LANCET. Yours faithfully,

Calverley, near Leeds, Nov. 27th, 1876. W. K. GIDDINGS.

"TO THE INHABITANTS OF CALVERLEY AND THE NEIGHBOURHOOD.—At the urgent request of numerous friends, Mr. T. S. Pitts, Physician, Surgeon, and Accoucheur, has decided to open a Branch Practice at the house of Mr. William Wright, Thornhill-street, Calverley, where he may be consulted every Monday, Wednesday, and Friday from two to three o'clock P.M.

"Residence, The View, Pudsey."

PLACENTA PREVIA.

To the Editor of THE LANCET.

SIR,—The following case, by no means a common one in obstetrics, occurred to me in October last, and I should be pleased to have the opinion of some of your readers upon it, particularly as regards the best mode of procedure in like future cases.

Elizabeth T——, aged thirty-eight, a laundress, was attended by a certified midwife on Oct. 21st last, in labour with her eighth child, the seven previous ones being quite natural and speedy. On the eve of the 21st the midwife found on her arrival her patient in a state of syncope from excessive hæmorrhage, the os uteri but slightly dilated, and the placenta placed over the neck and opening of the uterus. From the prostrate state of the patient and hæmorrhage going on, I was sent for at once, and with difficulty ruptured the membranes, after which the hæmorrhage ceased, and did not recur. The os uteri was not sufficiently dilated or dilatable to make out the presentation. Restorative measures were adopted by means of beef-tea, brandy, &c., to support the strength under the prostrate anæmic condition. The following day at noon, twenty-four hours afterwards, the placenta was expelled by natural efforts, the child being retained in utero, with the latter forcibly contracted on it. The os was sufficiently dilated now only to detect the head presenting. As there were no uterine expulsive pains, a dose or two of ergot were given without any effect whatever. As there were now no pains or hæmorrhage, the patient was watched until the following day, thirty hours afterwards, when the os uteri suddenly relaxed, and a full-grown fœtus was expelled, which had the appearance of being alive a few hours before. The woman made a rapid recovery, and is now following her occupation as a laundress.

Was it right to give the ergot in this case? Could any further measures have been adopted to preserve the life of the child?

Yours obediently,

Oxford, November, 1876. H. P.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. G. Johnson, London; Dr. R. Barnes, London; Mr. J. Lane, London; Dr. Broadbent, London; Dr. Wiltshire, London; Mr. Henry Power, London; Dr. Yeo, London; Dr. Handfield Jones, London; Dr. Sturges, London; Mr. Maunder, London; Dr. Edmunds; Capt. Money; Mr. Tomes; Dr. Powell, London; Mr. Harding, Carnarvon, Cape Colony; Mr. Leeming, Kendal; Mr. Thornton, London; Mr. Banner, Brighton; Mr. F. Godfrey, London; Dr. Lowe, Lynn; Dr. S. Mackenzie, London; Mr. Coates, Salisbury; Mr. Martin, Glasgow; Dr. Blailock, Luke Co., U.S.A.; Mr. C. Green, London; Mr. Biggs, Colchester; Dr. Warren, Paris; Mr. Hardman, Blackpool; Mr. M'Creery, Great Missenden; Dr. Mackintosh, Chesterfield; Dr. De H. Hall, London; Mr. Grellet, Hitchin; Mr. Trott, Hartshill; Mr. Earp, Nottingham; Mr. Gerrett, St. John's, Newfoundland; Dr. Whipham, London; Mr. Francis, Sutton; Mr. Bell, St. Sidwells; Mr. Magnus, London; Dr. Will, Aberdeen; Mr. Van Meen, Brussels; Mr. Giddings, Calverley; Mr. Mortimer, New York; Mr. Owens, Birmingham; Mr. Oliphant, Denbigh; Mr. Newman, Bowness; Mr. Hellearl, Leytonstone; Mr. Gentles, Derby; Mr. Boddy, Camberwell; Mr. Gabb, London; Major Burgess; Dr. Mackintosh, Downham Market; Dr. Childs, Uppingham; Dr. Gayton, Homerton; Dr. Tuckwell, Oxford; Dr. Hollis; Yarmouth; Dr. Cargill, Jamaica; Mr. Thorp, Little Norton; Mr. Lamb; Dr. Wardell, Tunbridge Wells; Dr. Wright, Ormskirk; Mr. Gurner; Mr. J. Willis, Sutton Scoterly; Mr. S. Jones; Dr. Sutton, Oldham; Dr. Royle, Codford; Mr. Larkin; Mr. Wallace; Mr. Murray; Mr. Davies, Holywell; Mr. Hartness, Whitehaven; Dr. Vance, Plaistow; Mr. Gibson; Mr, Johnston; Mr. Crawford, Chepstow; Mr. Brown; Mr. Crampton, Kettering; Mr. Fortt, Fordingbridge; Mr. B. Ellison, Chatham; Mr. W. Handley, Ormskirk; The Medical Officers of Charing-cross Hospital; J. H. C.; An Indian Army Surgeon; Syracuse; F. B. M.; M.D. Edin.; Hospital Physician; A. A.; Justitia; A Senior Student; D. H. J.; Lobular Pneumonia; An Owner of Water-power Mills; L.R.C.P.; G. W.; The Royal Microscopical Society; X. Y. Z.; Meddig; Country Surgeon; Militia Surgeon; The Registrar-General of Edinburgh; Nemo; Miss A.; The Director-General of the Medical Department of the Navy; W. W.; One of the Unqualified; A. P.; A Perplexed One; A Correspondent and Subscriber; M.B.; M.D.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Coulton, Birmingham; Mr. Sutton, Smethwick; Mr. Allan, Cullen; Mr. Phelps, Freshwater; Mr. Robertson, Glasgow; Messrs. Smith and Son, Birmingham; Dr. M'Clure, Worle; Dr. Sherwood, Whitby; Mr. Lethbridge, Leicester; Mr. Wells, Glasgow; Mr. Shingler, Salford; Dr. M'Nab, Stirling; Mr. Ernst, London; Mr. Barnes, Brackley; Mr. Laybourne, Rhymney; Dr. Dickson, Buxton; Mr. O'Rourke, Cwm Avon; Dr. Hogg, Paris; Mr. Marshall; Messrs. Starling, Higham Ferrers; Dr. Dyson, Sheffield; Dr. Evans, Salford; Dr. Thomas, Sheffield; Dr. Harland; Mr. Lee; Dr. Morgan, Dublin; Mr. Haynes; Dr. Stevenson, London; B. B., Burnley; D. H. J., Plymouth; Medical, Kensington; Medicus, Surbiton; A. H.; Hector; H. R., London; M.D., Manchester; G. O. S., Alfreton; F. R. C. S., Middlesborough; E. S. E.; Medicus, Cambridge; H. H., Dalston; B. A., Oxford; S. J., London; E. H.; X. Y., Manchester; Medicus, Burton-on-Trent; Beta, Newcastle-on-Tyne; Alpha, Malton; L.R.C.S.E., Edinburgh; E. F. G., Leeds; L. B. B.; R. V.; M.D., Exeter; A., Dartmouth; A. B., Corsham; C. D., Walsall; F.R.C.S., Nottingham; E. C. R.; Medicus; V., Huddersfield.

Western Morning News, Record, Lakes Chronicle, Carnarvon Herald, Newcastle Chronicle, Hexham Herald, Manchester Guardian, Liverpool Post, Greenock Telegraph, South Wales News, Glasgow Citizen, Western Daily Mercury, Dudley Herald, Tunbridge Wells Gazette, East London Observer, and *North British Daily Mail* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, NOV. 30TH, 1876.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Nov. 24	29·98	S.S.E.	30	41	...	45	38	...	Foggy
" 25	29·52	S.E.	45	45	...	55	40	0·23	Raining
" 26	29·73	S.W.	48	51	...	54	34	0·10	Cloudy
" 27	29·38	S.	48	49	...	54	48	0·06	Raining
" 28	29·48	W.	39	41	...	48	40	0·29	Cloudy
" 29	29·54	W.	38	39	...	47	37	0·07	Overcast
" 30	29·73	S.E.	41	42	...	46	37	...	Foggy

Medical Diary for the ensuing Week.

Monday, Dec. 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—2 P.M. General Monthly Meeting.
MEDICAL SOCIETY OF LONDON.—8½ P.M. The adjourned Discussion on Dr. Edmunds' "Case of Cæsarean Section."

Tuesday, Dec. 5.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8½ P.M. The following Specimens will be exhibited:—Aneurism of Thoracic Aorta (two cases); Unobliterated Ductus Arteriosus; Fracture of both Sesamoid Bones of Fore-feet of Horse; Stricture of Œsophagus; a Fatty Tumour; Granulation Material from White Swelling of Knee; Ossification of Axillary Artery following Injury; Spontaneously Fractured Vesical Calculi; Sarcoma of Thigh; Tumour of Buttock; Brain of Microcephalic Infant; Sequel to Case of Tumour of Sciatic Nerve; Biliary Calculi Encysted in Peritoneal Adhesions; Aneurism of Aorta; &c. &c.

Wednesday, Dec. 6.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Rev. W. H. Dallinger, "On Navicula crassinervis, N. rhomboides, and Frustulia saxonica as Test Objects."
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Langdon Down, "On the Obstetrical Aspects of Idiocy."—Dr. Budin (of Paris), "On a Diagnostic Sign of Vaginal Hæmorrhage during Parturition."—And other communications.

Thursday, Dec. 7.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HARVEIAN SOCIETY.—8 P.M. First Harveian Lecture: Mr. James Lane, "On Syphilis."

Friday, Dec. 8.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. Discussion on "Leukæmia."—Dr. Hermann Weber: "Cases illustrating the Treatment of Rheumatic Fever and other Febrile Diseases by Salicin and its Congeners."—Mr. Brodhurst: "Cases of Subcutaneous Section of the Neck of the Thigh-bone."

Saturday, Dec. 9.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

TERMS FOR ADVERTISING IN THE LANCET.

For 7 lines and under ..... £0 4 6 | For half a page £2 12 0
For every additional line ... 0 0 6 | For a page 5 0 0

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Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.

N.B.—All letters relating to Subscriptions or Advertisements should be addressed to the Publisher.

Agent for the Advertising Department in France—
Mons. DE LOMINIE, 208, Rue Grenelle St. Germain, Paris.